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THE EDUCATION OF WOMEN

Its Social Background and Its Problems



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THE EDUCATION OF WOMEN

ITS SOCIAL BACKGROUND AND ITS PROBLEMS

BY

WILLYSTINE GOODSELL, PH.D.

ASSISTANT PROFESSOR OF EDUCATION

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

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PREFACE

That the twentieth century is the age of the woman and the child is a statement that bids fair to become a truism. Yet it is hardly more than a decade or two since social writers squarely faced and acknowledged this fact, so unprecedented in social history. Such tardy recognition is, in part, an index of the very gradual character of the changes which have been taking place in the life of womankind during the slow passage of many centuries; in part a sign of social indifference and conservatism. But, be the causes what they may, certain it is that in this age of social unrest and the heightened social consciousness that accompanies it, when well-nigh every custom and institution of society is exposed to the unsparing scrutiny of critical minds, women have been thrust into the forefront of discussion. The whole vexed question of woman's "sphere" and of her education and vocational training viewed in the light of that "sphere" has troubled the souls of men for more than a generation and is at the present time the subject of more or less partisan controversy.

Under such circumstances a study of the present transitional period, pregnant as it is with new trends and wholly novel points of view, seems not untimely. Nevertheless, it is fully recognized that, from the flux of existing conditions, in which new forms are constantly taking shape and old ones are in process of

rapid transformation, it is impossible to draw clearly formulated conclusions. The most that the interested observer can hope to do is to point out the more crucial problems, to present such facts as seem reasonably assured, to indicate tendencies and to forecast their desirable outcomes in the light of reflective experience. Such is the purpose of the present study which, perhaps, loses nothing by the author's attempt to be neither doctrinaire nor conclusive.

The author's sincere thanks are due to Professor Paul Monroe for the opportunity furnished by him for making this study and for the helpful advice and comment he has given from time to time. Thanks are also owing to the author's colleagues, Professor Edward L. Thorndike and Professor Leta S. Hollingworth, for permission to use liberal extracts from their books and articles. To the vivifying thought of Professor John Dewey the author is profoundly indebted for the educational and social philosophy, from the standpoint of which the many-sided problem of women's education has been viewed in this study.

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The selections from Charles Francis Adams's *Fa-*

miliar Letters of John Adams and His Wife, Abigail Adams, James M. Taylor's *Before Vassar Opened*, William DeWitt Hyde's *The College Man and the College Woman*, Alexander Inglis's *Principles of Secondary Education*, and David Snedden's *Problems of Educational Readjustment*, are used by permission of, and by special arrangement with, Houghton Mifflin Company, the authorized publishers.

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W. G.

New York, N. Y.

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THE EDUCATION OF WOMEN

Its Social Background and Its Problems

THE EDUCATION OF WOMEN



CHAPTER I

HISTORICAL SKETCH

At the very outset of human history woman's peculiar function was marked out for her. She was destined by Nature to be the mother of the race—to bear and bear again that humanity might perpetuate itself in the midst of an inhospitable environment. The grim struggle for existence, together with almost continuous warfare for hunting grounds, and later for a larger national territory, regularly carried off thousands of men. Then, too, child mortality was cruelly high in primitive society and has so continued down almost to the present day, owing to the ignorance of mothers, nurses, and physicians of the simplest principles of sanitation and child hygiene. Obviously a race so constantly depleted by death must be renewed as constantly by birth; therefore of necessity the work of women in society centered about the great tasks of maternity.

Now the fact that woman in the past found her supreme social function in bearing and rearing offspring had its inevitable effects upon her life. She was tied to her home and its immediate surroundings. Not for her in rude, early times, the stimulating pursuits of the hunter with their challenge to skill, resourcefulness, and ingenuity. Not for her the valuable training in group action gained by the men as fishers with nets, as

fighting units, as members of the tribal councils. In proportion as society advanced, woman's tasks fell more and more within doors. Her duty it was to prepare food for the members of her family; to see to it that her husband and children were clothed and warmed; that the supplies of grain and animal flesh, of fruits and vegetables, of wool and flax, furnished by the healthy, out-of-door labor of men, were carefully preserved and stored and accounted for. As time passed on and warfare led to the development of both a slave-owning and an enslaved class, the wives of men of property became directors of large retinues of slaves whom they trained in the performance of those household tasks which the mistresses shared. Beyond question the woman of past generations had enormous economic value. Family life, industrial life, and the whole complex superstructure of social life were dependent upon her productive labor. For long centuries industries centered wholly in the home; and even after the partial breaking down of the domestic system the housewife was still an important factor in economic life. And all the time she was performing her arduous domestic work she was bearing and nursing her offspring and giving the initial bent to their minds and characters.

It was the biological function of woman, then, that first determined the character of her work in behalf of the home. And the undeveloped state of industry together with the crystallization of the folkways are responsible for the perpetuation of this domestic system. In course of time sex division of labor came to be regarded as a divine law—not as a product of social conditions. In the confident words of a Greek husband of Socrates' day speaking to his girl-wife: "The gods

. . . have plainly adapted the nature of woman for works and duties within doors, and that of man for works and duties without doors. . . . [Therefore] it will certainly be necessary for you to remain at home; . . . and over such as have business to do in the house you must exercise a watchful superintendence. (Whatever is brought into the house you must take charge of it; whatever portion of it is required for use you must give it out; and whatever should be laid by you must take account of it and keep it safe, so that the provision stored up for a year, for example, may not be expended in a month.)" And again he says: "For the divinity . . . knowing that he had given the woman by nature, and laid upon her, the office of rearing children —has also bestowed upon her a greater portion of love for her newly-born offspring than on the man."¹

Such was the accepted social doctrine from a period long before the age of Ischomachus down to our own times. So far as husbands and fathers speculated about women at all, they were firmly assured of their functions in life—to bear children and to keep house.

Now if society's confident belief concerning women's duties had been accompanied by an equally firm assurance of the profound importance and value of these activities in the maintenance of social life and the furtherance of its ideal ends, all would have been reasonably well for women. But, unfortunately, this happy insight has been restricted, with some notable exceptions, to intelligent men and women of the present day. Few men and perhaps fewer women in the past have looked upon the functions of the "weaker sex" from

¹ Xenophon, *Economics*, in Monroe's *Source Book in the History of Education for the Greek and Roman Period*, pp. 41-43.

any other standpoint than that of family needs in the narrowest sense. Quite generally the family has been viewed in detachment from the social whole, rather than as an institution in organic relationship with other social institutions for the promotion of the best interests of community life. A man's home was in a peculiar sense his individual possession—his castle—and its members belonged to him. It is not surprising, then, that woman's work was conceived as domestic in the most restricted meaning, i.e., as made up of a round of household tasks from baby-tending to candle-making which required, it is true, manual skill, devotion, and sacrifice of self to the comfort of husband and children, but which demanded little social knowledge and insight.

Furthermore, the constant demand upon men to protect their homes and tribal property in time of war tended greatly to enhance their prestige at the expense of women. Giving birth to children was an undramatic affair taken as a matter of course; whereas defense of hunting and fishing grounds against the surprise attacks of marauding tribes required conspicuous bravery and endurance on the part of all the males of the group and was both thrilling and spectacular. Without such united action the tribe could not have survived but would have been reduced to slavery or serfdom. It followed that the protection of the tribe was, from the first, rated far higher than its perpetuation.

Since woman's environment was narrowly personal, it is small wonder that her nature responded to the selected stimuli daily brought to bear upon it, and that she failed to develop in any marked degree those social qualities so highly esteemed by civilized men.

Such intellectual attributes as accuracy and breadth of thinking, together with such indispensable social traits as the spirit of group coöperation, group fair play, and willing obedience to group law, even when it pinches the individual, were not conspicuous in most women of the past, whatever other admirable characteristics they unquestionably possessed. Inviolable chastity and absolute devotion to the well-being of every member of her family, from her husband to her newest baby, were the virtues men supremely valued in a woman; and it is hardly necessary to point out that these virtues might easily coexist with a selfish and individualistic spirit toward the community at large. When any human being's powers are detached from a broad, social setting and are required to develop in a limited personal field, they reveal the cramping effects of the restrictions that have been imposed upon them. And women have proved no exception to the general rule.

In consequence, men, viewing "with a scornful wonder" the "female" thus shaped by social circumstance very early reached the conclusion that women were inferior to themselves in all the higher intellectual, social, and moral qualities. Therefore they argued that women must be kept in strict subordination to fathers and husbands and rarely, if ever, allowed to taste a liberty which they would surely abuse. The ideal of womanhood through the ages has been a modest, docile, clinging creature, trained in home-keeping arts, with physical charms sufficient to compensate for an empty mind, and with unlimited capacity for self-immolation. It followed that education of an intellectual sort played but a small part in woman's life. Such training as she

received, with few exceptions, was rigidly limited to deportment and domestic industries, with some religious and moral instruction of a strongly dogmatic flavor, designed to reinforce established ideas and customs. Quite naturally it has resulted that women have been among the most powerful conservative forces in social life. The classic example of this fact is seen in India, where the bitter hostility shown by the huge mass of uneducated Hindu women toward any change in hide-bound customs hangs like a dead weight round the necks of the more progressive men. Likewise a study of the history of Western nations, up almost to the nineteenth century, would show that few women have been found upon the side of reforms in religion, politics, education, or social usage. Until very recently theirs has been the broad, well-travelled road of established folkways and traditional ideas.

During the last decades of the eighteenth century the first telling blows were struck at this rigid social system. With the substitution of machinery for hand-work, with the concentration of labor in towns and factories, and, above all, with the entrance of women into industrial life outside their own homes, the transformation of woman's life began. For when women became regular wage-earners and steady contributors to the family income they took the first long strides toward economic independence. During the nineteenth century England and most of the States of America began to enact legislation which gave to married women not only the absolute ownership of their wages but also of their real and personal property acquired before marriage. Such legislation has proved, in the event, little short of revolutionary. For it meant, of

course, that women, whether married or in the position of *femmes soles*, were released in large part from that age-long financial dependence upon men which, more than any other contributory cause, had been responsible for their social and intellectual subordination.

Together with this economic emancipation of wives and mothers went other privileges of a legal nature. To married women were granted rights of contract and suit together with the right to will away real and personal property—privileges denied them since the Middle Ages. All of which signified that the law now took cognizance of married women as *legal personalities*, apart from their husbands; so that they might, almost for the first time in the recorded history of England and America, carry cases into the courts in their own names. Judge Blackstone's oft-quoted saying in his *Commentaries*—“Husband and wife are one, and the husband is the one”—no longer was valid in the legal world of England and most of the United States.¹

Other forces were at work to bring about a broadening of woman's social and intellectual horizon. In France, England, and America were being hewn out those principles of democracy which, at first applicable only to men and then solely in the realm of politics, were to receive broader and broader interpretation as the generations advanced. Our forefathers could not go on preaching the doctrines of liberty and equality without, in course of time, coming to see their

¹The first English law granting married women control of wages and a very limited control of personal (not real) property was passed in 1870. A later enactment in 1882 gave them absolute ownership of all real and personal property with legal rights of suit and contract. America began enacting such laws prior to the Civil War, but, owing to the fact that power to enact such legislation is the right of the several States, it happens that in a few States of the Union married women are still in a position of partial economic and legal dependence.

application to their daughters as to their sons. Doubtless this recognition was hastened by the industrial changes mentioned above with their profound reactions upon women's lives. / The planting of the eighteenth century was harvested during the nineteenth, when a more generous spirit with respect to the intellectual training of womankind tended to prevail in Europe and America. / Before the middle of the century unmistakable signs of dissatisfaction with the spineless type of education then in vogue for girls were not lacking. The boarding and "finishing" schools of England and America seemed signally to have failed to develop young women with a thorough knowledge of any subject whatever, or with an intelligent interest in the live problems of society beyond their own doorstep or neighborhood. / With some notable exceptions, these schools were turning out "females" of the eighteenth century *genre*, deplorably deficient in powers of straight, hard thinking, unbiased judgment, and emotional control, but skilled in the popular "accomplishments" of dancing, piano-playing, tambour work, and marvellous landscape effects in wool or paint. Thus polished off, these young women were returned to their homes at sixteen or thereabouts to carry on, under their mothers' instruction, a daily round of housewifely and social arts designed to "complete" their education and secure for them the husband and the "home of their own" that constituted the only proper goal of a self-respecting girl. Not to marry was to be a supreme failure, to have lost the one thing worth while, the one respectable vocation, other than teaching, then open to women. Listen to Jane Austen, describing with inimitably ironic humor the crowning

affair in the life of an Englishwoman little more than a century ago—the capture of a husband! Charlotte Lucas, aged twenty-seven, has just announced to her family her engagement to Mr. Collins:—

“The whole family . . . were properly overjoyed on the occasion. The younger girls formed hopes of *coming out* a year or two sooner than they might otherwise have done; and the boys were relieved from their apprehension of Charlotte’s dying an old maid. Charlotte herself was tolerably composed. She had gained her point, and had time to consider of it. Her reflections were in general satisfactory. Mr. Collins, to be sure, was neither amiable nor agreeable; his society was irksome, and his attachment to her must be imaginary. But still he would be her husband. Without thinking highly either of men or of matrimony, marriage had always been her object; it was the only honorable provision for well-educated young women of small fortune, and, however uncertain of giving happiness, must be their pleasantest preservative from want. This preservative she had now obtained; and at the age of twenty-seven, without having ever been handsome, she felt all the good luck of it.”¹

As late as 1849 Charlotte Brontë wrote feelingly on the same question—still a very live one in England:

“Believe me, teachers may be hard-worked, ill-paid and despised, but the girl who stays at home doing nothing is worse off than the hardest wrought and worst-paid drudge of a school. Whenever I have seen, not merely in humble but in affluent homes, families of daughters sitting waiting to be married, I have pitied them from my heart.”

Let it not be imagined that wholly different ideas regarding woman’s sphere and education were prevalent in the American colonies. Here, as in the mother country, marriage was well-nigh the only reputable vocation for a woman who shrank from occupying for life the coldest corner at the hearth of some grudging relative. Therefore the education of girls was pretty strictly

¹ *Pride and Prejudice* (ed. 1906), Vol. I, p. 106.

limited to religious and moral instruction and training in domestic duties.

The general attitude of the colonies toward this question is quaintly expressed in an old-time children's book, the *Catechism of Health*, which sets colonial girls in their proper places:

"QUERY: Ought female children to receive the same education as boys and have the same scope for play?"

"ANSWER: In their earlier years there should be no difference. But there are shades of discretion and regards to propriety which judicious and prudent guardians and teachers can discern and can adjust and apply."¹

Doubtless the "shades of discretion and regards to propriety" exercised their due influence upon the education of colonial girls, for we find Abigail Adams writing her husband in 1778:

"But in this country, you need not be told how much female education is neglected, nor how fashionable it has been to ridicule female learning; though I acknowledge it my happiness to be connected with a person of a more generous mind and liberal sentiments."

In 1817 the same gifted lady writes of her own early education:

"I never was sent to any school. . . . Female education in the best families went no further than writing and arithmetic, in some few and rare instances, music and drawing."²

But the dawn of a new order was at hand in both England and America. Toward the middle of the nineteenth century a novel type of higher school for girls appeared in England, with a course of study relatively broad and thorough, promising much for the future.

¹ Earle, *Child Life in Colonial Days*, p. 95.

² *Letters of John and Abigail Adams*, ed. by Charles Francis Adams, pp. XI and 339.

To this period belong Queen's College (1848) and Bedford College (1849) in London; Mary Buss's school for girls in Camden; and the excellent higher girls' school at Cheltenham, of which Dorothea Beale became the gifted head in 1858. Owing to the energy and initiative of Emily Davies, the Schools Inquiry Commission, appointed by Parliament in 1865, graciously consented to include girls' schools in their critical survey. The Report of this Commission, issued in 1868, included a detailed and scathing indictment of the so-called "higher" schools for girls in England with urgent recommendations for their reorganization and endowment.

From the time of the publication of this influential Report the reform of girls' education in England proceeded rapidly. New schools were founded and endowed; and the standards in all secondary girls' schools were raised by the establishment of examining boards at the universities of Oxford and Cambridge, which granted lower and higher certificates to girls qualified to pass their thorough examinations. Most significant, perhaps, were the efforts of the women of England to initiate reforms. Now thoroughly aroused to the intellectual needs of their sex, they organized associations throughout the country for promoting the higher education of young women. / The most widely influential of these organizations was the National Union for Improving the Education of Women. Not content with oral propaganda, this association published a *Journal* setting forth the deficiencies in the present system. It further assisted in the organization of the Girls' Public Day School Society in 1872—an organization which has had tremendous influence in

shaping the secondary education of English girls of the middle class.

But this was not all. The crying need for well-trained teachers in the new schools led Emily Davies, Mary Buss, Anne Clough, and others to labor enthusiastically to secure the advantages of university education to women. Their efforts resulted in the opening of the Cambridge and Oxford University examinations to qualified women and to the establishment at Cambridge of the two leading English colleges for women—Girton, incorporated in 1872, and Newnham incorporated eight years later. At Oxford four halls for women were opened a little later—Somerville, Lady Margaret, St. Hugh's, and St. Hilda's—all of which have now been chartered as colleges.

Following hard upon these reforms came the opening of England's provincial universities to women; and at the present time London, Leeds, Manchester, Bristol, Durham, and Birmingham admit women to full university privileges, including the courses in medicine and law. The Scottish, Welsh, and Irish universities have done likewise.

But it should not be inferred that every obstacle to the university and professional training of the women of England has been overcome and that all the doors of educational and professional opportunity swing open to them freely and smoothly. Although Oxford in 1920 abandoned its fixed policy of refusing degrees to women—no matter how thoroughly prepared—Cambridge has up to the present refused to depart from ancient precedent. Until now Cambridge has likewise denied to women the honorary titles won by them in the honors examinations. Thus, in 1890 a Newnham

student attained highest rank in the mathematical tripos.¹ By ancient custom the proud winner of this intellectual distinction is called the Senior Wrangler. But in this instance the title was conferred on the man next lower in rank solely on the ground of there being no precedent at Cambridge for bestowing such an honor on a woman. The terse warning of Dr. Goldwin Smith, uttered with true Johnsonian dignity to the dons of Oxford, admirably expressed the sentiment of many university men when confronted with the demands of women for more equal privileges: "You are in the face of a revolt against the limitations of sex."

Nor has the attitude of England's professional men, with respect to the admission of women to the practice of law and medicine, been more enlightened. The struggles of women in 1869 to obtain medical training at Edinburgh University make interesting reading in these strenuous times when women physicians during the World War were staffing great British hospitals at home and proving their worth in army hospitals behind the front. For many years after medical degrees had been conferred upon English women, they were excluded from the Obstetrical Society and from all other medical associations in Great Britain. Until 1920 women had knocked in vain at the fast closed doors of the legal profession. Sir Joshua Fitch voiced the feeling of many Englishmen when he wrote in the *Victoria Magazine*:

"If women ask for a system of mixed education, for admission to academic lectures, to the Bar, to the Church or the Legislature, the reply to such demands would be very simple. We cannot imperil the social order."

¹ The honors examination in mathematics at Cambridge.

What a shock would that honorable gentleman have experienced could he have seen his countrywomen, during the world conflict just past, putting their shoulders to the nation's wheel in a magnificent endeavor to preserve that social order which he charged them with seeking to overthrow!

Yet, although much has been accomplished, much remains to be done before equality of opportunity and reward becomes a reality for England's women. Writing in 1917 Mrs. Fawcett, long a leader in the movement to secure better educational and professional advantages to Englishwomen, has pointed out the defects in the present system:

“‘Thousands of women to-day are born free’; but it was at a great price that the pioneers had to buy their freedom.

“And to-day their freedom is by no means complete. They have won their way into one great and splendid profession (medicine); but nearly every other profession is still closed to them in this country. Important educational posts are open to them; they have themselves created a new profession in nursing, but both branches of the law are banged, barred, and bolted against them. No woman can become a chartered accountant, or take Holy Orders, nor is there any authorized channel by which woman can enter upon the higher posts of responsibility in the Civil Service. . . . There is no waste as great as the waste of the powers and gifts of the human beings who make up the nation. Let us resolve to make an end of it.”¹

An end was made of it, in law at least, by the passage of the Sex Disqualification Act (1920) making women eligible to the legal profession and to the office of magistrate. Also by this Act women may become chartered accountants.

¹ *Position of Women in Economic Life* in Dawson (Editor) *After-War Problems*, pp. 213-15.

It would be pleasant to record that young America was far in advance of the mother-country in according a liberal education to its daughters. But such does not appear to be the case, although reforms began somewhat earlier in the United States than in England. The first indication of a more liberal spirit toward the education of girls was shown by the opening of the town schools of New England to them after the Revolutionary War. Then came the age of the academy and the "female seminary"—schools where our grandmothers were taught Latin, French, mathematics, history, geography, and a smattering of book science. These institutions were the successors of the boarding and "finishing" schools, imported from England with other artificialities during the eighteenth century. In justice it must be said that they gave opportunity for a far more thorough education than was furnished by the earlier schools, since they were much less dominated by the prevailing ideal of "female accomplishments."

Prominent among the more advanced of these schools were the seminary founded at Troy, New York, in 1821 by Emma Willard and that organized in Hartford, Connecticut, a year later by Catherine Beecher. These two path-finders, fired by the vision of a new liberal education for women which should make them not only more intelligent wives and mothers but more skillful teachers in the rapidly growing schools, laid the foundations of that splendid educational structure which Mary Lyon, Alice Freeman Palmer, Ellen Richards, and other far-sighted women reared in later years. No one can understand the history of the education of American women, nor dimly appreciate the difficulties met and

overcome by its builders, who is not familiar with the aspirations, the struggles, and the triumphs of these leading women. All honor to these enthusiastic and patient pioneers, but especially, perhaps, to Emma Willard whose vision seems widest of them all. She it was who saw to the heart of the whole difficult question of girls' education in her day and made plain to others its fundamental defect. In her famous *Address . . . to the Members of the Legislature of New York Proposing a Plan for Improving Female Education*, published in 1819, Mrs. Willard declared in ringing terms that in the existing custom of civilized nations "female education has been left to the mercy of private adventurers; and the consequence has been to our sex, the same as it would have been to the other, had legislatures left their accommodations and means of instruction to chance also." Girls' schools of that day were characterized as "temporary institutions, formed by individuals, whose object is present emolument." Neither the accommodations as to rooms and libraries nor the instruction afforded were suitable to the needs of young women. Moreover, it "is for the interest of instructresses of boarding schools to teach their pupils showy accomplishments, rather than those which are solid and useful. . . . Any woman has a right to open a school in any place; and no one, either from law or custom, can prevent her. Hence the public are liable to be imposed upon, both with respect to the character and acquirements of preceptresses." With clear insight Mrs. Willard pointed out that the "great cause of these defects consists in a state of things in which legislatures, undervaluing the importance of women in society, neglect to provide for their education and suffer it to become

the sport of adventurers for fortune, who may be both ignorant and vicious." The remedy for these evils lies in frank recognition of the principle that it "is the duty of our present legislators to begin now to form the characters of the next generation, by controlling that of the females, who are to be their mothers, while it is yet with them a season of improvement."

Mrs. Willard then proceeded to outline her plan for a "Female Seminary" properly housed and equipped with apparatus and a library, in which solid instruction would be given under the four heads of Religious and Moral, Literary, Domestic, and Ornamental education. Under the last heading were included drawing and painting, music and dancing. Such seminaries, she declared, "would constitute a grade of public education, superior to any yet known in the history of our sex; and through them, the lower grades of female instruction might be controlled. The influence of public seminaries, over these, would operate in two ways, first, by requiring certain qualifications for entrance; and secondly, by furnishing instructresses, initiated in their modes of teaching, and imbued with their maxims."¹

This vigorous petition was deserving of better results than it achieved. To be sure, the New York Legislature showed a moderate approval of Mrs. Willard's *Plan* by an act incorporating her school at Waterford as an academy entitled to a share of the state "literature fund." The following year (1820) Governor Clinton, a warm advocate of the reforms championed by Mrs. Willard, called the attention of the legislature to the seminary at Waterford, which had "already attained great usefulness and prosperity," and declared

¹ *Address*, pp. 1-46, (ed. 1819).

that it represented "the only attempt ever made in this country to promote the education of the female sex by the patronage of government. . . ." In view of the importance to the home of elevating the "female character" the Governor urged the Legislature to extend its "munificence to this meritorious institution." The Senate responded to this appeal by granting the new academy \$2,000; but unfortunately the bill failed in the House. Moreover, the Regents of the State University decided that the school could no longer share in the literature fund. This decision was a tremendous blow to Mrs. Willard, especially as the expenses of her seminary at Waterford were outstripping its income. Therefore in 1821 the school was removed to Troy on the invitation of its citizens. The city corporation agreed to provide the building and land, and later appropriated to the use of the school a plot of ground valued at \$2,000. Here was established the famous Troy Female Seminary which, after an honorable history of a century still ministers to the education of girls under its new name of the Emma Willard School. So influential did the older school become that it is said to have furnished the inspiration for well-nigh two hundred seminaries patterned after it.

Not content with her work at Troy, Emma Willard wrote improved text-books for girls' schools, which had an enormous circulation, made addresses in her own country and abroad for the advancement of women's education, and joined with Henry Barnard in his vigorous campaign for the improvement of the public schools of Connecticut. No wonder an enthusiastic biographer says of her that she was "pre-eminently a Representative Woman, who suitably typifies the great

movement of the nineteenth century for the elevation of woman.”¹

Almost from the beginning of their educational careers, the serious national need for a better educated and trained teaching corps had been vigorously preached by Emma Willard and Catherine Beecher. Both of these leaders had bent their most earnest efforts to the upbuilding of public sentiment and conscience with respect to this question; and both had labored to train a body of efficient teachers in the seminaries they had established. In Massachusetts the project was taken up by Messrs. Carter, Brooks, and Horace Mann who carried forward a campaign of public enlightenment which resulted in the founding in that state of the first two normal schools in the country ~~in 1839~~. Yet, despite the urgent need for such schools, they spread very slowly and most of the work of preparing the country’s teachers fell upon the seminaries and academies. Up to the outbreak of the Civil War scarcely more than fourteen normal schools had been established.² However, their growth since 1865 has been very rapid. In the *Report of the Commissioner of Education* for 1917 there were listed 234 public normal schools and 45 private. Almost from their foundation these institutions have educated more women than men, and for many years they have been overwhelmingly professional schools for women. Witness the figures of the Commissioner’s *Report* for 1917 which show 2,941 male graduates and 20,496 female!

By the second decade of the nineteenth century, democratic ideas had gained such headway in this new

¹ Barnard, *American Teachers and Educators*, p. 168.

² Dexter, *History of Education in the United States*, pp. 377-8.

Republic as seriously to threaten the time-honored conceptions of the education proper to a "female." Not only were academies for girls springing up everywhere, but a demand was developing, here and there, for a new type of secondary school which should be wholly under public control and supported by public funds. The academies for girls were usually not free institutions; moreover, many girls had to leave their homes to attend them, which meant an added expense for board and lodging. New York and Boston were the first cities to meet the new demand by establishing public high schools for girls in the same year—1826. Unfortunately these promising ventures came to an untoward end. The Boston school was fairly swamped with girls eager for knowledge; indeed it appears to have been such an "alarming success" that the school authorities were dismayed at the prospect of large outlays for the school. In spite of a sharp rise in the qualifications demanded of the girls for entrance to the new High School, Mayor Quincy says of the pupils: "Not one voluntarily quitted it, and there was no reason to suppose that anyone admitted to the school would voluntarily quit for the whole three years, except in case of marriage." So the school was closed, after a trial of eighteen months, because the community was not prepared to meet the expense of so popular and growing an institution!

The New York school was likewise abandoned in 1828 after a building had been erected and equipped at a cost of \$20,300, and several "female instructors" engaged. In the *Memoirs of John Griscom*, one of the trustees of the New York Girls' High School, we gain light as to the cause of its abandonment. The writer

tells us that the school "lacked from the beginning an efficient head, who had a primary interest in its continued prosperity. The lady placed in it as principal *was chiefly remarkable for her skill in flower painting.*" A delightful comment on the educational system that had produced this able lady!

Despite these unpropitious beginnings, however, other attempts were soon made to establish high schools at public expense. From the first, girls were admitted, although they were often sequestered in a separate wing of the building, or, as in the case of Boston, New York, Baltimore, and a few other eastern cities, were provided with separate buildings. But questions of economy as well as the growth of a healthy sentiment in favor of the education of boys and girls in common have combined to make the United States one of the most advanced exponents of coeducation in modern times. The new secondary schools spread rapidly and grew in public favor after the Civil War. The *Report of the Commissioner of Education* for 1880 shows 800 of these public schools; and in 1917 they had increased to 12,003. (It is interesting to note that) for forty years or more the enrollment of girls in American high schools has outnumbered that of boys. In 1915-16, 54.63 per cent of the total attendance was composed of girls; and in 1917-18 the percentage of girls was more than 57.¹

But the steadily growing American sentiment in favor of the education of girls did not stop with the establishment of public secondary schools. Even before the Civil War some attempts were made by cour-

¹ See *Statistics of Public High Schools*, 1917-18, published by the Statistical Division of the Bureau of Education, 1920.

ageous souls to secure for young women the benefits of higher education so long enjoyed by their brothers. So-called "colleges" for women sprang up like mushroom growths in the South and the Middle West during the decades preceding 1860. Unfortunately existing records show that many of these aspiring institutions were little, if at all, more advanced in standards and courses of study than the better type of "female seminaries." Three or four of these "colleges" in the South make emphatic claims to be each the first real institution of collegiate rank granting degrees to women in America or in the world. } Such are the claims of Elizabeth College, chartered in New Washington, Mississippi, in 1819; of the Georgia Female College in Macon, Georgia, established in 1836; and of the Mary Sharp College in Winchester, Tennessee (1851). Ex-President Taylor of Vassar College, after patiently examining such evidence as still exists in the form of prospectuses and printed curricula, gives it as his conclusion that none of these higher schools was doing a grade of work approximate to that of Harvard, Yale, or Princeton.¹

More hopeful as the herald of a new order was the foundation of Oberlin Collegiate Institute (1833), later chartered as Oberlin College, an institution of full collegiate rank to which women were admitted as candidates for degrees from the beginning of its history. The melancholy truth must be recorded, however, that the new college offered a much diluted and abridged "ladies' course" to young women as an alternative to the more advanced course leading to a degree; and many fair students appear to have preferred the less

¹ See Taylor, *Before Vassar Opened*, Ch. I.

strenuous path to learning. In 1856-7, twenty-three years after the establishment of the college, 229 women students were taking the "ladies' course" and only 20 the degree courses. Other institutions in the North offering work of college grade to women were Antioch, a coeducational college founded in 1853, and Elmira College, chartered in 1855 with the express purpose of affording to young women an advanced education no whit inferior to that which their brothers received in the older colleges of the East. Unfortunately for the worthy ambitions of its founders, however, the funds at the disposal of this first "real College" for women were insufficient to maintain the standards set up at the outset of its history. Therefore, in a very true sense, Vassar College, chartered in 1861, opened in 1865 at the close of the Civil War, may be awarded the distinction of being the "oldest of the well equipped and amply endowed colleges for women in the United States." Beyond doubt Vassar was a pioneer in the collegiate education of women; for the high standards it raised in respect to academic and physical training, to college equipment and to the solid scholarship of its faculty, it has never lowered.¹ Thus it became to a large extent a model for the women's colleges which succeeded it.

Prior to 1860 two state universities, Utah and Iowa, had thrown open their doors to women; but it was not until the period of national optimism and reconstruction that followed upon the Civil War that one state university after another admitted young women to full membership and unrestricted privileges. At the present time only one state university—Virginia—still re-

¹ See Taylor, *Before Vassar Opened*, pp. 81-84.

fuses to grant approximately equal opportunities to women. However, in 1920 the Rector and Visitors of this famous university voted to offer "to women of maturity and adequate preparation opportunity in the College for specialized training and for graduation with a vocational baccalaureate degree in Chemistry, Biology, other laboratory sciences, and Architecture and Commerce. In the Department of Graduate Studies opportunity is also offered to pursue courses leading to the degree of Master of Arts, Master of Science, and Doctor of Philosophy. In the field of professional training, work is offered resulting in graduation with a professional degree in the Departments of Education, Engineering, Law, and Medicine."

The very rapid increase in enrollment of women students at colleges and coeducational universities for the twenty-year period 1890-1910 is shown in the *Report of the Commissioner of Education* for 1910. In women's colleges the rate of increase was 348.4 per cent, while in coeducational institutions the rate was even higher—438 per cent. This enormous growth is all the more remarkable when compared with the corresponding rate of increase for men during the same period, which was 214.2 per cent. In the year 1890 the percentage of men and women college students in the United States was respectively 68.3 and 31.7. But in 1917-18 the Bureau reports that 14,481 first and graduate degrees were conferred on women and 17,007 on men; which means that 46 per cent. of all the graduates in that year were women. Of course these figures are misleading since this was the year in which the United States entered the war. If we take the percentages of men and women students in 1915-16 we find them to be

respectively 64.4 and 35.6. Probably America has realized more thoroughly than any other civilized country the vital importance to the well-being of a nation of a trained and enlightened womanhood. Yet it can hardly be maintained that the American people even to-day are as whole-heartedly committed to the policy of the higher and professional education of their young women as they are to that of men. The *Report of the Commissioner of Education* already cited gives some interesting figures concerning the gifts and bequests made to 27 institutions during 1909-10. Of these Yale, Harvard, Princeton, and Columbia universities received amounts aggregating \$6,216,033; while the only two women's colleges listed, Bryn Mawr and Wellesley, received respectively \$707,475 and \$173,473. Again, in 1915-16 five universities for men (Yale, Harvard, Princeton, Pennsylvania, and Columbia) received gifts amounting to \$6,700,601; while five colleges for women (Smith, Mount Holyoke, Vassar, Wellesley and Goucher) received bequests totalling \$1,711,315.¹

Such disparities exist in part, of course, because the alumni of men's universities are more numerous and financially more able to help their Alma Mater than are the alumnae of women's colleges; but another cause may be found in the fact that wealthy American citizens are not yet so actively interested in the higher education of women as in that of men.

Far more apparent is this half-hearted and doubtful attitude when the question of training women for the historic professions is under consideration. Although the first medical schools for women in America were established in Boston as early as 1848 and in Phila-

¹ *Report of Commissioner of Education, 1917*, Vol. II, pp. 343-52.

delphia in 1850, and although many of the best medical schools in the country now offer training to women, it yet remains true that the age-old prejudice against the practice of medicine by women has by no means wholly broken down in America. Evidences of this fact may be found not alone in the refusal of a few of the finest medical schools to receive women, but also in the reluctance of hospitals to appoint women as internes and to afford them ample opportunities for clinical practice. This condition is responsible in large measure for the slow increase in the number of women in the medical schools of the United States. In 1912-13 there were only 835 women students in schools of medicine; and this small number showed an actual decrease in 1917-18, when the total number of women students was only 643.¹ Not much more encouraging are the reports concerning the entrance of women into the professions of law and theology. In 1912-13 only 372 women were enrolled in schools of law, and 449 in theological schools.² In 1917-18 the number of women studying law had increased to 822 and the number studying in schools of theology to 780.³ Clearly there is no very strong movement of women toward the so-called higher professions, doubtless because of the very obstinate prejudices to be overcome before a woman can establish a successful practice.

The foregoing historical sketch, brief and incomplete though it may be, may nevertheless serve to show how far modern nations have advanced beyond the age when woman's realm was everywhere believed to lie

¹ See Bulletin, 1920, No. 34, Statistics of Universities, Colleges and Professional Schools, p. 55

² *Report of Commissioner of Education*, 1913, Vol. II, pp. 317-18.

³ *Ibid.*

solely in the domestic circle and her education to consist in the mere ability to read, write, and keep accounts, with a smattering of "accomplishments" as a lure for a prospective husband. Instead of being a neatly ticketed specimen in a rigidly classified social system, woman has become to many thoughtful persons a somewhat baffling, if not an irritating, enigma. Her economic and legal emancipation, together with the liberation of her mind have resulted in producing a perplexing array of problems concerning her real functions in the modern social world.

It is idle to deny that many women to-day are becoming dissatisfied with the restricted sphere which so long has been theirs, and this holds true almost in proportion to the extent of their higher education and professional training. Even among that large body of women whose homing and maternal instincts are very strong, there is much restlessness and dissatisfaction with the state of "enthroned domesticity," as it has been so long interpreted and enforced by public opinion. Deplore this unsettled condition as some of us may, it seems rather futile to refuse to face the situation in the vain hope that it may be transitory. The old order, wherein maidens stayed at home waiting for marriage, and matrons moved with complete absorption through a daily round of domestic tasks, is on the way to becoming as dead as the *ancien régime*. A few years ago an enthusiastic educator described the present situation in the following words:

"A century ago Madame de Staél ventured to say that genius knows no sex; we have reached a more memorable truth, that work, no matter what its quality, knows no sex. Women have achieved education, the key of liberation, the tool of talent, and all careers

are open. In the United States there are eight million women in gainful occupations, and the number grows. In the higher activities of mankind, women have won indisputable recognition.

"In 1850 there was not, in the United States, I believe, a woman lawyer, journalist, physician, architect, librarian. Now women plead before the Supreme Court, they are twelve per cent. of the newspaper force, they practice medicine in every city of the Union and architecture in the great cities; they are two-thirds of the library force of our twelve hundred public libraries.

"Sixty years ago there were no trained nurses. To-day trained nurses, eighty thousand or more, make our hospitals possible, and they are finding a place in our schools and factories. Our whole public school system, with its infinite potentialities, rests on the work of five hundred thousand women; education has become a small body of men entirely surrounded by women. . . .

"Everything is incredible, impossible till someone does it. Women's ability in the creative arts was once an incredible thing; it is a commonplace to-day, in poetry, fiction, painting, and sculpture. Women's ability in science was once an incredible thing, but we have the recorded achievement of the highest quality of Eleanor Ormerod in entomology and Mme. Curie in physics and chemistry—the latter the only scientist so far twice honored by the Nobel Prize (1903, 1911). In the field of mechanics, no one claimed for women any ability whatsoever. . . . In the 1860's women took out over forty patents a year; in the 1880's over one hundred a year, in the 1890's one a day, and by 1910 they had 8,596 patents to their credit—in a field where nothing whatever was expected of them.

"The world war has destroyed the last traditional limitations on the work of women. They can fairly claim now what was only a half truth when the phrase arose, '*les carrières ouverts aux talents.*'"

If this vivid picture be accepted as true to the facts in its main outlines we are clearly confronted with some puzzling questions. Are the higher education and the professional training of women unfitting them for marriage and motherhood? Is such education to result

¹ F. H. Sykes, *The Social Basis of the New Education for Women*, in the *Teachers College Record*, May, 1917, pp. 229-30.

in the production of a type of woman more interested in her chosen life work than in giving life to a new generation? Is the maintenance of the race to be left more and more to the women of the laboring classes, whose educational and economic opportunities have hitherto been so meagre as to breed in them no aspirations for a larger sphere of activity and achievement than the home in its more limited sense? And shall society accept without counteracting efforts the existence in its midst of a growing body of highly educated women, keen and capable of intellect, skilled in some useful social work but biologically sterile? Finally does this condition result in a eugenic loss to the community and the nation which is not wholly compensated for by the valuable services of these women?

SELECTED READINGS

1. Ancient Period

DONALDSON, JAMES, *Woman: Her Position and Influence in Ancient Greece and Rome and among the Early Christians*, Chs. I-IV, and pp. 122-27, 153-64, 175-91.

FRIEDLANDER, L., *Roman Life and Manners under the Early Empire*, Vol. I, Ch. V.

JEROME, ST., *Letters (In Select Library of Nicene and Post Nicene Fathers)*, Letter CVII.

MASON, AMELIA J., *Woman in the Golden Ages*, pp. 107-166. (1901).

MONROE, PAUL, *Source Book in the History of Education*, pp. 37-50, 175-79, 337-8, 361-3, 401-406, 451-52.

PUTNAM, EMILY, *The Lady*, Chs. I, II.

ROSSIGNOL, JEAN PIERRE, *De l'Education et de l'Instruction des Hommes et des Femmes chez les Anciens*. Paris; 1888.

2. Middle Ages

ECKENSTEIN, LINA, *Women under Monasticism*, pp. 48-50, 88-95, 112-17, 160-83, 223-55, and Ch. IV.

HENTSCHE, ALICE, *De la litterature didactique du moyen age s'addressant specialement aux femmes*, pp. 57, 68, 75, 97-103, 164-66.

LEACH, A., Article on the Higher Education of Women in Monroe, *Cyclopedie of Education*, V: 796-98.

PUTNAM, EMILY, *The Lady*, pp. 69-157.

WRIGHT, THOMAS, *History of Domestic Manners and Sentiments in the Middle Ages*, pp. 237-40, 269-82, 338-40.

3. Renaissance

BURCKHARDT, J., *The Renaissance in Italy*, Part V, Ch. VI.

CANNON, MARY, *The Education of Women during the Renaissance*. Washington, 1916.

CASTIGLIONE, B., "The Courtier," *Scribner's*, 1901. Book III: 171-94, 205-9, 218-27.

WATSON, FOSTER, *Vives and the Renaissance Education of Women*, pp. 1-159, 175-93.

4. Education of Englishwomen

ALEXANDER, WM., *History of Women*, Vol. I: 71-3, 319, 332, 461, 501-2, 506; Vol. II: 488-9, 492, 502-11.

BLAESE, W. L., *The Emancipation of Englishwomen*, Chs. I-V.

BREMNER, C. S., *Education of Women and Girls in Great Britain*, Sections I-III.

DEFOE, DANIEL, "A Projected Academy for Women," *Essay on Projects*, pp. 164-75. (1797).

LEACH, A., "Higher Education of Women in England," in Monroe, *Cyclo. of Ed.*, V: 797-803.

MARKHAM, G., *The English Housewife*. 1683.

PUTNAM, E., *The Lady*, pp. 247-81.

Reports of the U. S. Commissioner of Education, 1894-5, I: 805-91; 1918, pp. 65-74; 1919, pp. 153-9.

WOLLSTONECROFT, MARY, "Vindication of the Rights of Women," in *Humboldt Library of Science*, XV: 37-45, 75-83, 171-6, 183-4.

5. Education of Women in America

ADAMS, C. F., *Familiar Letters of John Adams and his Wife*, pp. xi, 28, 149-50, 155, 213, 239-40. 1876.

ADAMS, ELIZABETH K., "Higher Education of Women in the United States," in Monroe, *Cyclo. of Ed.*, V: 803-10.

BOONE, R. G., *Education in the United States*, pp. 68-70, and Ch. XXI.

DEXTER, E. G., *History of Education in the United States*, Ch. XXI.

FITHIAN, PHILIP, *Journal and Letters* (1767-74), pp. 50-60, 75-6, 83-7, 103, 109.

GILCHRIST, B., *Life of Mary Lyon*.

JOHNSON, C., *Old Time Schools and School Masters*, pp. 1-4, 12-13, 20-29, 138-45.

SMALL, H. W., (1) *Early New England Schools*, Chs. VI, XI. (2) "Girls in Colonial Schools." *Education*, XXII: 552.

WILLARD, EMMA, *Plan for Improving Female Education: a Memorial Addressed to the New York Legislature*, 1819. (Reprinted as a pamphlet, Middlebury, Vt., 1918.)

CHAPTER II

COLLEGE WOMEN AND THE MARRIAGE RATE

Some Statistical Studies.—“Is the woman’s college as now conducted a force which acts against the survival of the race which patronizes it? Whatever intellectual and moral superiority a race may have, it needs also a certain amount of reproductive impulse in order to remain on the earth. No culture, art, science, or morality can save it unless it produces about three matured children per married, child-bearing couple, and any race which does not do this is doomed to extinction.”

Thus writes an alarmed contributor to the *Journal of Heredity*; and he follows this dark prophecy with the statement: “Women are the capital of the race. The farmer that uses his land for golf-links and deer preserves instead of for crops has but one agricultural fate; so the civilization that uses its women for stenographers, clerks, and school-teachers instead of mothers has but one racial fate.”¹

It may possibly be objected by some captious readers that in these statements the author appears to regard woman as a sort of racial slave. But, setting aside the objection, it may pertinently be asked what are the writer’s grounds for concluding that college

¹ Sprague, Robert J. “Education and Race Suicide,” in *Journal of Heredity*, April, 1915, p. 180 *et seq.*

women "are not greatly sought after as mates, to share in the work of getting a living and founding a family . . . ?" It need hardly be said that this question is not a new one. For twenty years or more educators have been wrestling with it; and from time to time it re-emerges to provoke fresh discussion and bring forth a new crop of statistics. What, then, are the recent facts and figures in regard to this moot question?

In an article in the *Journal of Heredity* the writer quoted above shows that of the 959 Vassar graduates of the classes 1867-1892 only 53 per cent. were married in 1915, leaving 450 graduates, or 47 per cent., in single blessedness. That means, of course, that in a period varying from 23 to 48 years after graduation only a little more than half of Vassar's graduates had become wives. Wellesley's figures reveal much the same condition. Of the 528 alumnae of the classes 1875-1889 only 50 per cent. were married in 1915, from 26 to 40 years after graduation. Of the 3,927 Wellesley alumnae in the more recent classes 1890-1912 only 31 per cent were married in 1915. Nor do the figures with respect to the birth-rate among women graduates at all correspond to Mr. Sprague's idea of the needs of the situation. Far from there being three matured children to every married graduate in the classes mentioned above, Vassar shows only 1.91 such children, while Wellesley records show 1.65 children per married graduate of the classes 1890-1912. Clearly college women are not perpetuating themselves.¹

In 1903 a careful study of the marriage and birth rates among college graduates was made by G. Stanley

¹ *Op. cit.*, p. 161.

Hall and Theodate Smith. The figures with respect to Vassar, Smith, and Wellesley are interesting:—

| COLLEGE | CLASSES | PER CENT. OF GRAD- UATES MARRIED IN 1903 | CHILDREN | |
|-----------|---------|--|-------------------------|----------------|
| | | | Per married graduate | Per Mother. |
| Vassar | 1867-76 | 55.41 | 2.03 | 3.09 |
| | 1877-86 | 50.79 | 1.53 | 2.57 |
| | 1887-96 | 28.02 | .79 | 1.58 |
| Smith | 1879-88 | 42.7 | 1.99 | 2.08 |
| | 1889-98 | 28.35 | .77 | 1.22 |
| Wellesley | 1879-88 | 46.55 | 1.81 | 2.37 |
| | 1889-98 | 25.47 | 1.04 | 1.67 |

The briefest examination of these figures reveals some significant facts. From 27 to 36 years after graduation only slightly more than 55 per cent of Vassar's early alumnae were married; and among this group the average number of children born was slightly more than two per married member and three per mother. Of the next ten classes (1877-86) less than 51 per cent were married from 17 to 26 years after graduation; and the average number of children per married member and per mother shows a marked decrease. But most striking is the decline in the proportion of marriages among the next ten classes, 1887-96. The alumnae of these classes had been graduated from 7 to 16 years, therefore their ages were approximately 28 to 37 years; yet the percentage of married members is only 28.02. The average number of children per married graduate has shrunken to .79, and per married mother to 1.58.

The figures for Smith and Wellesley tell a similar tale—less than half the graduates are married from 15 to 25 years after graduation; and only slightly over *one-fourth* are married from 5 to 14 years after gradu-

ation. Moreover, the number of children per married graduate of the last ten classes studied does not vary greatly from that of Vassar, i.e., less than one child in the case of Smith and 1.04 in the case of Wellesley.

But objection may be made that these figures were compiled eighteen years ago. More recent are the investigations of Miss Van Kleeck for the Association of Collegiate Alumnae published in the *Journal* of the Association for May, 1918. This study is made of a large proportion of the living graduates in 1914 of eight women's colleges (Barnard, Bryn Mawr, Mt. Holyoke, Radcliffe, Smith, Vassar, Wellesley, and Wells) with one coeducational university—Cornell. Of the 23,582 living graduates, 71 per cent., or 16,739, returned records on which the study is based. These records show that the *average* per cent. of married graduates is 39.1. Of course it should be remembered, in interpreting these statistics, that the more recent classes far outnumber the earlier ones. If the last ten classes were eliminated from consideration (ten years being allowed between graduation and marriage) the marriage rate would be conspicuously higher. This statement is borne out by the fact that the median marriage age, as disclosed by this investigation, is 27 years and 3 months and by the further fact that nearly one-sixth of the 6,182 married graduates who reported their age at first marriage were married between 30 and 35 years of age.¹

After reflective consideration of these statistics the question may suggest itself: Is there a higher marriage and birth rate among the graduates of men's colleges and universities? Apparently there is, even though

¹ *Journal of the Association of Collegiate Alumnae*, May, 1918, p. 579.

the rate has steadily declined during a considerable period. In 1917 a study was made of Stanford's Marriage Rate and the results were published in the *Journal of Heredity*. These indicate that of 1,000 graduates of Stanford University in the classes of 1892-1900 73.2 per cent. of the men were married and only 48.5 per cent. of the women. Allowing ten years for a graduating class to marry, the Stanford rate for men is close to that of Harvard and Yale which are respectively 74 and 78 per cent. The fact of a higher marriage rate among college men receives further support from the investigations of Bunker with respect to Syracuse University graduates. The statistics are as follows:

| CLASSES | PER CENT. MARRIED IN 1917 | | SURVIVING CHILDREN PER MARRIED GRADUATE | |
|-----------|------------------------------|-----|--|------|
| | Women | Men | Women | Men |
| 1862-71 | 87 | 87 | 1.68 | 1.69 |
| 1872-81 | 81 | 90 | 1.06 | 1.77 |
| 1882-91 | 55 | 84 | .79 | 1.72 |
| 1892-1901 | 48 | 73 | .75 | 1.00 |

These figures indicate a steady and rather rapid decline in both the marriage rate and the number of children per married graduate among the women, with a more gradually decreasing rate among the men. The lower marriage rate of Syracuse women, combined with the lower birth rate among them, leads Bunker to conclude that the total reproductive rate of the women graduates is only about *one-half* that of the men. It is interesting to speculate a little as to the probable reasons for so marked a disparity. Doubtless if the age-old law forbidding women to make proposals of marriage were wholly removed, leaving no reproachful ghost behind, the marriage curve of college women and the resulting birth curve as well, might take a sharp

upward trend. But even so alarming a departure from a custom, which conservatives would have us believe has its roots deep laid in Nature, would hardly bring the marriage and birth rates among college women to the level of that of the men. It is probable that the woman who has enjoyed the benefits of higher education in the liberal arts unconsciously forms for herself a lofty conception of the marriage relation and refuses to compromise with her ideals when she discovers that her suitors fall short of them. Not driven by the sex urge to the same extent as men, women find it more possible to hold steadily before them an ideal of marriage as a close spiritual comradeship, a community of interests and aims, extending to every vital aspect of life. Rather than fail in attaining the best many a college woman cheerfully accepts the lot of the spinster worker whose economic and personal independence is her chief compensation for turning her back on home and motherhood.

It may be asked how does the marriage rate among college women compare with that of the nation at large. The *United States Census* for 1910 furnishes the answer. It shows that of the women 25 to 34 years of age 79.1 per cent. are married; and of those between 35 and 44 years 88.6 per cent. are married. Contrast these percentages with those for college graduates approximately the same age set forth in the preceding pages; e.g., Vassar's 28.02 per cent. married between the ages of 28 and 37; and less than 51 per cent. married between the ages 38 to 47 years.

But it may very pertinently be objected that it is grossly unscientific to compare the marriage rate of a selected class of women graduates of eastern colleges

with the rate for the mass of American women in the country at large. Still less is it admissible to conclude that the strikingly lower rate in the case of the former group is due to having spent four years in a woman's college. Only when the graduates of colleges for women are compared with a similar number of their sisters, cousins and friends of *the same social class* can any conclusions of worth with regard to the declining marriage rate be drawn. It is difficult to see how the discussion of this question can be greatly clarified by the mere piling up of statistics concerning the small proportion of marriages among the alumnae of our women's colleges. The question inevitably suggests itself: Would not a comparative study of the marriage rates of college women and non-college women of their own walk of life tend to show that the decline in the proportion of marriages is characteristic of the social group to which they both belong?

Unfortunately no such investigation has been made, although a comparative study of the marriage-age and the birth-rate among two homogeneous groups of women appeared more than fifteen years ago in the *Publications of the American Statistical Association*. In this article Dr. Mary Roberts Smith presented the statistical results of a comparison of 343 married college women with 313 non-college wives who were their sisters, cousins, or friends and thus were drawn from the same social class. The investigation showed that the average age of marriage of the college women (Class A) was 26.3 years; of the non-college women (Class B) 24.3 years—a difference of two years. This age difference reduces, of course, the fertile period of women

in Class A. However, the statistics revealed the interesting fact that although Class B had a larger number of children than Class A, the respective figures being 584 and 566, yet if the number of children born were considered with regard to *the number of years of married life* Class A had the advantage. The mothers in Class A bore one child to every 5.9 years of married life, whereas the women in Class B bore one to every 6.71 years. The statistics gathered by Mrs. Sidgwick in England, in the course of a similar investigation, show much the same results.

Obviously this study is chiefly of interest as indicating that, at least with respect to the birth-rate among college women as compared with non-college women of their own walk in life, the easy generalizations of certain writers concerning the unhappy influence of a college education do not seem to be sustained. May it not be possible, then, that similar comparisons made with respect to the marriage-rate would reveal that the decline is a class phenomenon?

But, in the absence of much needed comparative studies of the kind described above, the marital statistics of college women continue to arouse concern among social writers. Many readers not trained in the interpretation of statistics tend to see in these a positive indictment of college education for women. Unquestionably such figures must be used with great caution if we would escape unwarrantable conclusions. Several years ago the need for care in their interpretation was pointed out by a writer in the *Political Science Quarterly* who boldly declared that the marital statistics of college women "no more establish a causal relation between marriage and the higher education of women

than the occurrence of rain in a certain phase of the moon proves that the latter governs the former.”¹

In making deductions from the figures at hand it is well to bear in mind that they are not commonly chosen from the colleges and universities in the country at large but from Vassar, Mt. Holyoke, Smith, Wellesley and Bryn Mawr—eastern colleges for women. This fact alone has an important influence upon the figures which may well escape the average reader. In the first place the families from which the alumnae of these colleges are drawn are distinctly above the average in financial means and social standing. Moreover a large proportion of the students come from urban centers. These two conditions tend to reduce the marriage and birth rates; for both are relatively low in cities and in precisely that prosperous middle class from which eastern colleges are largely recruited. Probably, writes Emerick, in commenting on this fact, “there is no body of college women less comparable with those from the country at large.”

Coeducation and the Marriage Rate.—Let us turn, then, to such evidence on this question as can be secured from our great coeducational universities in the Middle West and on the Pacific coast. In an article on “Co-education and marriage” published in the *Journal of Heredity* in January, 1917, Mr. Price gives the percentage of women graduates of the University of California married in stated periods from 1864 to 1904. Instead of taking all the graduates, however, Mr. Price selected every tenth name from the alumnae directory, thus getting a random sample of women graduates. The records follow:

¹ Emerick, *Op. cit.*, Vol. XXIV, p. 270.

| PERIOD | PER CENT. MARRIED IN 1916 |
|---------|---------------------------|
| 1864-84 | 28.6 |
| 1885-94 | 50.0 |
| 1895-99 | 65.7 |
| 1900-04 | 60.1 |

With the exception of the first two periods, when the number of women students at the University of California was very small, the marriage percentages are higher than in the eastern colleges for women. It is significant also that the writer found that *one-third* of all the women graduates of California who marry at all marry University of California men. These results were confirmed by a further study of the class of 1906 as a whole. This class, which had been graduated ten years when the study was begun, included 189 women, of whom 90, or nearly 50 per cent., were married. Exactly one-third of these women had married men of their own university.

Not content with investigating the marriage rate at California, Mr. Price went far afield and collected the following statistics from colleges and universities in the Middle West.

| INSTITUTION | PERIOD | PER CENT. OF WOMEN GRADUATES MARRIED IN 1916 |
|--------------------------------|-----------|---|
| Oberlin | 1850-1905 | 65.2 |
| Ohio State | 1885-1905 | 54.0 |
| Wisconsin | 1870-1905 | 51.8 |
| Illinois | 1880-1905 | 54.0 |
| Kansas Agricultural College | 1885-1905 | 67.6 |

Figures for the more recent classes 1900-1904 show plainly the marked disparity in the marital percentages of eastern colleges and western state universities.

| INSTITUTION | PER CENT. OF WOMEN GRADUATES (1900-1904) MARRIED IN 1916 |
|-----------------------------|---|
| Wellesley | 44.0 |
| Wisconsin | 44.5 |
| Illinois | 46.9 |
| Ohio State | 57.0 |
| Oberlin | 58.9 |
| California | 60.1 |
| Kansas Agricultural College | 63.5 |

From these statistics Mr. Price concludes that none of the coeducational institutions has a marriage rate as low as that of eastern colleges. But he shrewdly adds that it may be the marriage rate of eastern women in general is lower than the corresponding rate in the west.¹ Such in fact is the case. The United States Census for 1910 gives the following percentages in selected states in the East, Middle West, and on the Pacific coast.

| STATES | FEMALES MARRIED | |
|----------------|-----------------|--------------------------|
| | Age-groups | Per cent. |
| Eastern | Massachusetts | 25-34 62.6 35-44 72.2 |
| | New York | 25-34 69.4 35-44 76.1 |
| Middle western | Ohio | 25-34 75.1 35-44 80.2 |
| | Kansas | 25-34 80.3 35-44 86.4 |
| Pacific | California | 25-34 72.4 35-44 77.1 |
| | Washington | 25-34 78.4 35-44 85.5 |
| | Oregon | 25-34 76.6 35-44 84.4 |

¹ *Journal of Heredity*, VIII. 43-45, January, 1917.

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These figures indicate that Massachusetts and New York respectively have 37.4 and 30.6 per cent. of single women between the ages of 25 and 34, whereas California and Washington respectively have only 27.6 and 21.6 per cent. The percentage of single women of the given ages in Kansas is even lower, being only 19.7. Preliminary press announcements issued by the Bureau of the Census on January 26, 1922, confirm these inequalities in marital percentages. They show that the New England and Middle Atlantic divisions, where most of the women's colleges are located, have the following percentages of single females 15 years of age and over:

| | |
|-----------------|------|
| New England | 32.1 |
| Middle Atlantic | 29.8 |

The corresponding percentages for western divisions are:

| | |
|----------|------|
| Mountain | 23.4 |
| Pacific | 23.5 |

It is apparent, then, that not all the disparity in the marriage rates of coeducational universities and eastern colleges for women can be laid at the door of the latter.

But if eastern colleges cannot be held wholly responsible for the low marriage rates among their graduates, yet it is probably true, as one writer observes, that "four years of early womanhood spent in seclusion from free acquaintance with men, and in a pretty elaborate and pleasant social life constructed out of purely feminine materials leave a woman less disposed and less fitted afterwards for informal friendships and co-operation with men; and it may be that these informal

relations prove oftener the path to marriage for thoughtful women than more conventional social intercourse.”¹

Doubtless the older colleges in the East have developed a mellow atmosphere and a type of organized life, social and academic, which is full of charm for the girls who share in it. But it can hardly be maintained that such a conventional existence is normal or designed to promote comradeship and sympathy between the two sexes who must somehow work and play and plan together as well as marry and carry on the race. Indeed, one writer declares with assurance that separate colleges for women “are from the viewpoint of the eugenist an historic blunder.”

Responsibility of College Education for the Low Marriage Rates of College Women.—The critics of college education for women, when considered in the light of the marriage rate, have definite strictures to pass upon it. They point out the failure of higher education to make young women desirous of having homes of their own and of being efficient managers within them. In a recent article the statement is made with some bitterness that the “stubborn resistance of these colleges to the introduction of education for domestic efficiency, especially in the care of the infant, has been amazing. They are thereby neglecting one of the most important factors in a woman’s sound education.”²

In similar spirit writes Dr. Sprague: “There is needed throughout the nation a campaign of public education through church, school, and legislation, to strengthen the ideals and economic foundations of the

¹ Millicent Shinn, “Marriage Rate of College Women,” in *The Century*, October, 1895, p. 947.

² Johnson and Stutzman, in *Journal of Heredity*, June, 1915, p. 252.

family. . . . If college women would combine their culture with domestic ideals and efficiency there would be a higher demand for them as helpmeets and mothers of the new generation." Nor do the writer's animadversions stop here. He is profoundly impressed by the fact that a high proportion of the teaching body of women's colleges is composed of women and of unmarried instructors of both sexes. "More strong men," he says, "are needed on the staffs of public schools and women's colleges, and in all of these institutions more married instructors of both sexes are desirable. The catalogue of one of the colleges shows 114 professors and instructors of whom 100 are women, of whom only two have ever been married. Is it to be expected that the curriculum created by such a staff would idealize and prepare for the family and home life as the greatest work in the world and the highest goal of women, and teach race survival as a patriotic duty? Or would it be expected that these bachelor staffs would glorify the independent vocation and life for women and create employment bureaus to enable their graduates to get into the offices, schools, and other lucrative jobs? The latter seems to be what occurs."¹

These are sharp indictments and since they drive close to the heart of a large and complex question they deserve careful consideration. It is possible that a campaign of public enlightenment concerning the basic character of the family in social life, together with the introduction of carefully planned courses on home-making and infant care in women's higher schools might have the effect of causing at least a temporary rise in the marriage rate of college women. A largely

¹ *Journal of Heredity*, April, 1915, p. 162.

conceived and liberalizing course in home economics might well awaken in young women a new interest in the home and in its ordering, to the ends not only of efficiency but of beauty and happiness. Indeed at such institutions as the State Colleges of Agriculture of Kansas and of Iowa, where much attention is given to domestic science, the marriage rates are notably high. In 1916 69 per cent. of the women of the Iowa State College belonging to the classes of 1902-1905 were married, and 72.7 per cent. of all the alumnae from 1872-1905 were married. Of the early classes 1872-1881 actually 95.8 per cent. had become wives.¹ As we have seen, Kansas Agricultural College shows 63.5 per cent. of the alumnae of the classes 1900-1904 married in 1916. Of course it should be kept in mind that the marriage rates of these two states are high. Then, too, the principle of selection cannot be ignored in interpreting these figures. The young women who attend the Home Economics schools of these colleges are very frankly looking forward to marriage; just as the men who are pursuing the agricultural courses, drawn as they are largely from farming communities, are planning soon to set up farm homes of their own in which wives will be indispensable co-workers.

But a principle of selection is no less at work in determining the personnel of liberal arts colleges for women both in the East and West. It is not necessary to accept the suggestion of one writer that the college has "had the effect of segregating from the general population on the average the non-productive type of woman [who is] more or less lacking in the normal sex instincts." Unquestionably the selective influences most

¹ Blumer, in *Journal of Heredity*, May, 1917.

actively at work in determining the college-woman group are intellectual and moral. It should not be forgotten that in entering college young women give expression to their intellectual tastes, their ideals, and their ambitions and hopes for the future. The fact that a girl free to choose elects to submit for four years to the intellectual discipline of a college usually means that her mental horizon has widened, that she has already developed a taste for intellectual activity, that she is planning to use her trained mind and developed capacities in a life career. To put it in the refreshingly frank fashion of a recent contributor to the *New Republic*: "Only 39 per cent. of college girls marry, not because education has that effect but because the girl who elects to take a college course puts the things the college stands for before the attentions of the male sex. Those same girls who elected to go to college—given congenial work—would have shown the same percentage of marriage had they never gone to college."¹

Influence of Present Social Conditions on the Marriage Rate.—This is only to say that the educated young woman of to-day is an individualized being in precisely the same way as her educated brothers or men friends are individualized. And it is this obstinate and inconvenient fact that critics like Mr. Sprague refuse utterly to reckon with. Looking at the question solely from the biological standpoint of the renewal of the species, these men urge colleges to "idealize and prepare for the home life as the greatest work and the highest goal of women, and teach race survival as a patriotic duty." This demand shows the prevailing tendency to think of men as individuals, entitled to ex-

¹ *Op. cit.*, May 25, 1918.

ercise personal initiative and choice with respect to their life work, and to lump women together as prospective wives, mothers and home-makers—a tendency so deep-grounded that it will probably not be uprooted for generations. Needless to say the fact that nearly all women in the past *were* housewives and mothers does not argue that all were well fitted so to be or that this would have been their chosen career had they been free as their brothers to elect it. Probably, as Dr. Leta Hollingworth has suggested, the maternal instinct is distributed among women in varying degrees; and the social devices employed in the past to encourage motherhood, ranging from the pressure of public opinion, art and literature to that of powerful religious sanctions, have effectively played their part in reinforcing this instinct to the end of perpetuating the race under adverse social conditions.¹

But the circumstances which once demanded the devotion of the majority of women's lives to the great tasks of child-bearing and rearing have been profoundly altered. Increased knowledge of the principles of sanitation, nutrition, and child hygiene has resulted in a steady decrease in the child mortality once so appallingly high. And this is not all. Social and economic conditions and the controlling ideas which spring from them have been gradually transformed since the Industrial Revolution. There is a growing demand for women's work in the world outside the home, not alone in the field of unskilled labor where scores of thousands are employed, but likewise in the skilled professions and occupations. Beyond question the alumnae of our colleges are responding to the call in rapidly growing

¹ See Amer. Jour. of Soc., XXII: 19-29.

phalanxes. Although a considerable percentage are still flocking into the teaching profession, yet the proportion of those entering other skilled vocations was on the increase even before the war,¹ and is rapidly growing. And with this change in the economic situation has come a change in public opinion with respect to "woman's sphere."

Students of social conditions, then, are confronted with two stubborn facts with which they must reckon in any honest attempt to interpret the marital statistics of college women. The first is the individualization of women that is in part the result of social circumstances and in part the consequence of their higher education. This leads many college graduates to desire a congenial outlet for their powers, not merely in selfish pursuits but in skilled work which has human significance and value. Among these trained and cultured women a growing number find satisfaction for their nurturing instincts in the professions of teaching, social service, private and public health nursing, and medicine. Secondly, the idea is rapidly gaining acceptance in the public mind that unmarried women, at least, should not settle back into a state of contented dependence upon fathers and brothers. In an age when both college and non-college women are being educated, like their brothers, to accept a sturdy ideal of financial independence, and when at the same time locked doors of vocational opportunity are swinging open for them, it seems idle to talk of home life "as the greatest work and the highest goal of women," and of race perpetuation as their supreme "patriotic duty." We may deplore, if we will, the transformations that have taken

¹ See *Jour. of Assoc. of Coll. Alum.*, May, 1918, p. 561.

place since the days of our grandmothers; we may even do something, through broadly-planned courses centering about the home, to stem the current of educated women into the arena of the world's work. But we cannot turn the hands of the social clock backward to the "good old days" of our forbears, for these are irrevocably gone. So long as women form standards of married life with which they refuse to compromise; so long as society affords them a chance to exercise their trained powers in congenial work; and, above all, so long as the doors of economic opportunity are shut in the face of the married woman, there will be women, college-trained and otherwise, who will not marry.

The situation is further complicated by the fact that the marriage rate is declining among college men, and, presumably, among that well-to-do middle class from which these men are recruited. Many a woman college graduate would marry if she were asked by the right man. Indeed, in this whole controversy writers are prone to forget that, in the matter of mating, custom decrees that women must play a passive and sometimes a waiting rôle. The length of time now demanded of even college men before they can establish themselves in a profession or in business is so extended that not infrequently the romantic years are passed before marriage can be considered. In such a case the man often discovers that he can be made perfectly comfortable in bachelor quarters, and has ample opportunity to meet his women friends when he is so inclined. Marriage comes to mean to him not only loss of independence, but large financial outlay to maintain a wife and family; therefore the wedded state is likely to become less and less attractive to the young bachelor.

with the passage of years. It is because of this situation that the critics of the present type of college education for women come out strongly in favor of home economics training in women's colleges. Thus one critic writes:

"The very proper preference in many intelligent men for girls trained to be efficient wives and mothers is one of the causes of the low marriage rate and late time of marriage of the graduates of women's colleges. The trained girl can and will marry a man with an income too restricted for the support of an inefficient wife."¹

Here is clearly an *impasse*. A certain group of unmarried men do show a marked desire to secure efficient home-keepers as wives; while the young women they meet socially have in many instances tasted the joys of economic independence and success in a chosen vocation and have little interest and less skill in domestic work. As we have seen, it seems doubtful that the introduction into colleges of compulsory courses in household economy could do much to induce a certain type of young woman, intellectually gifted or with organizing ability of a high order, cheerfully to relinquish the profession for which she is trained in order to take up the tasks of cooking, cleaning, and sewing for which she is little fitted. But—and this is a point often ignored—this does not necessarily mean that the door of marriage must remain permanently closed to these young women, vigorous of body and mind and warm of heart, capable of making excellent wives and mothers in a social system more responsive to their needs and aspirations. Gradually, very gradually it must be

¹ Johnson and Stutzman, *Journal of Heredity*, June, 1915, p. 252.

nor is it evident that any other form of education would have increased their productiveness materially." On the other hand, the college should provide another kind of training for the sisters of these intellectuals, the "normal, all-round, red-blooded women [who] are the really superior type . . ." and whose "domestic and motherly instincts seek equally if less obtrusively the opportunity for full development and expression. . . ." ¹

This view is reinforced by that of another social writer who holds that college-bred women are less apt "to be wholly absorbed in their children *and to give themselves up to them with a complete abandonment.*" He concludes that if this be true "society loses no more by reason of the celibacy of an educated man or woman than from that of one less favored, and that the celibacy of the cultured classes if it exists is not peculiarly to be deplored." ²

Waiving the point whether total "absorption of mothers in their children" and "complete abandonment" to them have beneficent effects on either mother or child, it may be pointed out that no satisfactory scientific data have been collected which go to show that college women are inferior in sex and maternal instincts to other women of their class. Such a theory appears to be a pure assumption from the fact of the relatively low marriage and birth rates among the alumnae of women's colleges—a condition which has social and economic causes and which, it is necessary to repeat, may very well be found to exist in the entire social group to which college women belong.

¹ Banker, "Women's Marriage Decrease," in *Jour. of Heredity*, VIII: 212.

² Gardner, "College Women and Matrimony," in *Education*, XX: 288-9.
Italics mine.

A quite opposite point of view to the above is enunciated by other writers who regard the eugenic problem involved in the low marriage rate of college women as a serious matter. In a recent article on the small proportion of the alumnæ of Stanford University who marry, the author states: "It can hardly be doubted that most of the Stanford women are of precisely the type whose eugenic contribution the race most needs."¹ This theory is shared by Professor D. Collin Wells, who declares that it "is for the advantage of mankind that superior women should become mothers." Yet Mr. Wells is obliged to admit that intellectual ability "is not a dominant Mendelian character that breeds true to the parental type." Nevertheless Karl Pearson has found that "exceptional fathers produce exceptional sons at a rate 3 to 6 times as great as non-exceptional—the superior stock produces above the average at over twice the rate of the inferior stock. Pairs of exceptional parents produce exceptional sons at a rate more than 10 times as great as pairs of non-exceptional parents."²

From a purely eugenic standpoint, then, it is socially desirable that college-trained women should marry and bear children. The difficulties in the path have already been suggested and would not seem to be insuperable. But, in the considerable interval which will doubtless have to intervene before society cheerfully accepts the married professional woman, may not students of society and of education derive comfort and satisfaction from the records of the college women who *do* marry? It is a well established fact

¹ *Jour. of Heredity*, VIII: 172-3, April, 1917.

² *Phil. Trans.* cxcv, 38; quoted in Wells, "Some Questions concerning the Higher Education of Women," in *Amer. Jour. of Soc.*, XIV: 733-4.

that divorces among college women are very rare. Also the figures of the *Census of College Women* referred to above show that of 4,626 children born to women graduates of the classes 1900-1910 only 4.6 per cent. had died in 1915; and of the 447 children born to married alumnae of the classes 1910-1915 only 4.9 per cent. had died. These are low child-mortality figures, contrasting most favorably with those of the country at large and especially with the rates in selected industrial centres among the working class.¹ In warm eulogy of the kind of marriages college women make, an alumna writes: "If less than fifty per cent. of college women marry, yet of that number few take husbands 'for a home' or because they have nothing else to do. . . . Alumna's marriage . . . means that a mature, independent, trained woman deliberately chooses to give the direction of her life to a man because she loves him well enough to find in so doing her greatest happiness. Of such mating are Alumna's children born—of a 'selected' father, of a mother who has at least had an opportunity for knowledge,—born to a heritage of intelligent love and care. So they ought to be a power for good, even though they are few."²

In conclusion the old question may be asked in all seriousness whether, after all, the welfare of society is so bound up with the increase of the population as it is in improving its quality. Nature has seen to it that the mating instinct in normal men and women and the maternal instinct³ in many women shall be urgent

¹ See *Mortality Statistics* of the United States Dept. of Commerce, Bureau of the Census for 1916, p. 57. Also the Reports on *Infant Mortality* issued by the Children's Bureau of the United States Dept. of Labor.

² "Alumna's Children," by an "Alumna," in *Pop. Sci. Monthly*, LXV: 45-6.

³ The existence of this instinct is being challenged by contemporary psychologists but the question is still unsettled.

enough to secure the continuance of the race. It is the problem of civilized society, with its face set toward the dawn of better things, to secure for every child born into its midst the best possible conditions of home life and of education. To improve the physical, intellectual, and moral quality of its members is society's paramount task; and the broad and useful education of every young man and woman in such wise as to secure his or her finest contribution to the common life, be it within or without the home, would appear to be the most efficient method to attain this end. The idea has been forcefully expressed by a contemporary writer: "In fact the question which the State has to ask of its educated men and women is not whether they marry, but what they are; not whether they add to the physical but to the intellectual and spiritual life of the world. . . . In a word, the marriage of a man or woman, or of any particular class of men or women is inconsequential to the state. The imperative thing is the character of their thought, their act, their mental output. History and observation surely do not warrant the assertion that the quality of these is determined by marriage."¹

If this be a sound conclusion it seems advisable for colleges and universities to continue their work of educating young women in a broader and more sympathetic understanding of human life in its physical and social environment, as well as in a more effective use of their trained powers for social ends. By all means let there be ample opportunity for these young women to become acquainted with the history, the problems, and the rich contributions of the family as the fundamental institution of society, determining as it does in

¹ Gardner, "College Women and Matrimony," in *Education*, XX · 291.

large measure the character and the spiritual level of social life in any age. Let the schools also furnish facilities for understanding and for developing skill in meeting the problems of the home beautiful, the home sanitary, the home efficient. But, when all these opportunities have been furnished, let educators be content to permit each young woman as an individual to determine for herself the character of her education and her life work under the expert and sympathetic guidance of trained advisers. In many young graduates Nature's call will prove too strong to be resisted and sooner or later they will become wives and mothers. Others will wait long to find the ideal mate and, not finding him, will expend, during a busy lifetime, their knowledge and skill in serving society's needy ones—the poor, the mental and moral defectives, the sick, the children and youth of the nation—as well as in the struggle to realize a more humane and beautiful social order. Sterile lives? Perhaps. But when has society elected to measure the fruitfulness of individuals wholly in biological terms?

SELECTED READINGS

ABBOTT, FRANCES M., "A Generation of College Women." *Forum*, XX: 377. 1895.

"Three Decades of College Women." *Pop. Sci. Mo.*, LXV: 350 59. 1904.

"Alumna's Children," by an "Alumna." *Pop. Sci. Mo.*, LXV: 45-51; 279-81. 1904.

BANKER, HOWARD J., "Women's Marriage Decrease." *Jour. of Hered.*, VIII, No. 5, May, 1917.

BLUMER, J. C., "Marriage of Iowa College Women." *Jour. of Hered.*, VIII, No. 5, May, 1917.

CHENEY, MAY S., "Will Nature Eliminate the College Woman?" *Jour. of Assoc. of Coll. Alum.*, January, 1905.

EMERICK, C. F., "College Women and Race Suicide." *Polit. Sci. Quar.* XXIV: 269-83, June, 1909.

HALL, G. STANLEY and SMITH, THEODATE L., "Marriage and Fecundity of College Men and Women." *Ped. Sem.*, X: 375-414. March, 1903.

Journal of Heredity, Series of articles in Nos. for April and June, 1915; January, April, May, 1917.

LOCKWOOD, LAURA E., "College Women as Wives and Mothers." *Sch. and Soc.*, III: 332. March 4, 1916.

NEARING, NELLIE S., "Education and Fecundity." *Pub. of Amer. Statis. Assoc.*, XIV. June, 1914.

VAN KLEECK, MARY, "A Census of College Women." *Jour. of Assoc. of Coll. Alum.*, XI: 557-591. May, 1918.

WELLS, COLLIN D., "Some Questions concerning the Higher Education of Women." *Amer. Jour. of Soc.*, XIV: 731ff.

CHAPTER III

SEX DIFFERENTIATION IN EDUCATION

Views of the Advocates of a Sex Differentiated Education.—During the last half century, a period in which the education of girls and women has been increasingly regarded as a matter of serious concern, a group of individuals, educators and others, has consistently advocated a type of education for women different in important particulars from that for men. The grounds of their somewhat ardent advocacy of a differentiated education for women are physiological, psychological, and social. Probably the most eloquent exponent of this view is Dr. G. Stanley Hall, who has devoted many pages to the presentation of evidence gleaned from the opinions of biologists and physicians, all tending to support his theory that the education of young women in the crucial adolescent years should be sharply differentiated from that of their brothers. Since Dr. Hall's books are widely circulated and since, moreover, he is the ready spokesman of a section of the community by no means negligible, his views should be examined in some detail.

In his voluminous work on *Adolescence* Dr. Hall attacks the problem of “Adolescent Girls and Their Education.”¹ At the outset he proclaims his own position and devotes most of the chapter to the presentation of evidence, more or less empirical, in support of it. Thus

¹ Vol. II, Ch. XVII.

the argument throughout is *a priori*, and the opening statement confidently categorical:

“Our modern knowledge of woman represents her as having characteristic differences from man in every organ and tissue, as conservative in body and mind, fulfilling the function of seeing to it that no acquired good be lost to mankind, as anabolic rather than katabolic . . . as normally representing childhood and youth in the full meridian of its glory in all her dimensions and nature. . . . Her whole soul, conscious and unconscious, is best conceived as a magnificent organ of heredity, and to its laws all her psychic activities, if unperverted, are true. . . . Biological psychology already dreams of a new philosophy of sex which places the wife and mother at the heart of a new world and makes her the object of a new religion and almost of a new worship, that will give her reverent exemption from sex competition and reconsecrate her to the higher responsibilities of the human race, into the past and future of which the roots of her being penetrate; and where the *blind worship of mere mental illumination has no place*; where her real superiority to man will have free course. . . .”¹

It is not difficult to recognize in this exuberant account of woman an age-old philosophy but thinly disguised in a masquerade of “biological psychology.” How familiar, even in their new pseudo-scientific garb, are these ideas of woman “as conservative in body and mind,” “as anabolic rather than katabolic,” as possessed of a soul which is “a magnificent organ of heredity”! The glorification of the “wife and mother,” her “reverent exemption from sex competition,” the care-

¹ *Op. cit.*, II: 562. Italic mine.

ful exclusion of woman from the joys of "mere mental illumination"—these doctrines are well-nigh as old as civilization.

But what evidence is adduced in support of this view of woman and her functions? The greater part is drawn from the writings of physicians and biological writers and is designed to show, in the words of one of them, that "the male is the agent of variation and progress, and transmits variations best, so that perhaps the male cell and sex itself originated in order to produce variation. . . . An ideal or typical male is hard to define, but there is a standard ideal woman." Dr. Storer's article on *Female Hygiene*, published in 1871, is cited as evidence that "girls should be educated far more in body and less in mind." This appears to be the view of several other physicians, one of whom declares that each "individual stage and organ has just so much energy. We should strive sedulously to keep the mental back in all and especially in females, and not 'spoil a good mother' to make a grammarian." Reference is further made to the theories of Dr. Crichton who holds that "differences between sexes are involved in every organ and tissue." So concerned is this gentleman that the plain lessons of biology and physiology shall not be set at naught that he bitterly laments the opening of the theological department of the University of St. Andrews to women as "a down-hill step fraught with confusion and disaster." As a *coup de grace* to the opposition he deals the final logical blow by quoting Huxley's dictum that "what has been decided among prehistoric protozoa cannot be annulled by an act of Parliament"!¹

¹ See Hall, *op. cit.*, pp. 567-86 for the positions summarized above.

Dr. Hall next considers the health of women students and cites the testimony of various physicians and educators in an attempt to show that the health of girls, especially in respect to menstruation, is unfavorably affected by higher education. The results of Engelmann's study of 4,873 cases of school and college girls, made about 1900, are given in full. These show a higher percentage of menstrual sufferers during normal school and college years than in the period preceding entrance.¹ However, Dr. Hall admits that this is not the conclusion of Dr. Mary Jacobi who "insists there is nothing in the nature of menstruation to imply the necessity or even the desirability of rest for a woman whose menstruation is really normal." She even declares that university education involves no strain other than women ordinarily can bear without injury, so that they often pass through college without effect upon their health either way.²

After introducing the reader to the views of biologists and doctors Dr. Hall goes on to elaborate a theory of his own—that of the marked divergence of the sexes in the pubescent period. Nature, declares the author, "decrees that with advancing civilization the sexes shall not approximate but differentiate, and we shall probably be obliged to carry sex distinctions, at least of method, into many if not most of the topics of the higher education. Now that woman has by general consent attained the right to the best that man has, she must seek a training that fits her own nature as well or better." Boys and girls tend to separate in the early teens and lead their lives apart. "Their

¹ Hall, II: 587.

² *The American Girl of To-day*. President's Address, Am. Gyn. Soc., Washington, 1900. Cited in Hall, *op. cit.*, 587.

home occupations differ as do their plays, games, tastes. History, anthropology, and sociology as well as home life abundantly illustrate this. This is normal and biological." In view of these facts "it is high time to ask ourselves whether the theory and practice of identical coeducation, especially in the high school, which has lately been carried to a greater extreme in this country than the rest of the world recognizes, has not brought certain grave dangers, and whether it does not interfere with the natural differentiations seen everywhere else." Dr. Hall's final indictment is rendered against the woman's college on the ground that "it is based upon the assumption, implied and often expressed, if not universally acknowledged, that girls should primarily be trained to independence and self-support, and that matrimony and motherhood, if it come, will take care of itself, or, as some even urge, is thus best provided for." Far from accepting this heresy, Dr. Hall paints in vivid colors the ideal school for the education of adolescent girls, always "with the proper presupposition of motherhood." Briefly the scheme is as follows: Girls between the ages of twelve or thirteen and the early twenties should be trained in the country "in the midst of the hills," with the paramount aim of establishing their health. At this point the author gives sensible advice concerning out-of-door sports and exercise, wholesome diet, and regular sleep. *Manners* should receive careful attention on the theory that they "are really minor or sometimes major morals." Another controlling ideal should be *regularity*. And here Dr. Hall breaks into an enthusiastic panegyric on periodicity which he characterizes as "perhaps the deepest law of the cosmos [which] cele-

brates its highest triumphs in woman's life. For years everything must give way to its thorough and settled establishment. In the monthly Sabbaths of rest the ideal school should revert to the meaning of the word leisure. *The paradise of stated rest should be revisited, idleness be actively cultivated; reverie, in which the soul, which needs these seasons of withdrawal for its own development, expatiates over the whole life of the race should be provided for and encouraged in every legitimate way, for in rest the whole momentum of heredity is felt, in ways most favorable to full and complete development.* Then woman should realize that *to be* is greater than *to do*; should step reverently aside from her daily routine and let Lord Nature work. . . . Another principle should be . . . to *keep the purely mental back and by every method to bring the intuitions to the front; appeals to tact and taste should be incessant; a purely intellectual man is no doubt biologically a deformity, but a purely intellectual woman is far more so.*¹

But even Dr. Hall would not have this human instrument for race perpetuation left wholly ignorant. She is to study Nature; with emphasis on the "poetic and mythic factors," art, literature, and history "with the biographical element very prominent throughout, with plenty of stories of heroes of virtue, acts of valor [and] tales of saintly lives. . . ." But metaphysics, the theory of knowledge and logic should have the least place, and physics and chemistry should "be kept to elementary stages." Very important is "domesticity" which "will be taught by example in some ideal home building by a kind of laboratory method. The training

¹ *Adolescence*, p. 639. Italics mine.

should aim to develop power of maternity in soul as well as in body so that home influence may extend on and up through the plastic years of pubescence. . . .”¹

Perhaps there are individuals to whom this ardent sketch of the emasculated education suitable to young women will make powerful appeal. But it may not be too daring to predict that most thoughtful men and women will be divided between a desire to laugh and to protest. Obviously Dr. Hall has elevated regard for the sex and maternal functions of woman into a cult which profoundly affects his conception of her entire education. He would seriously advocate the withdrawal of healthy girls from active, wholesome life during monthly periods in which they would be encouraged to let their souls “expatriate over the whole life of the race” as a preparation for their high mission. Quite cheerfully the author ignores alike the fact of woman’s individuality and the aim of all education worth the name—the development of free personality in the broadest possible social medium. Such a philosophy of sex would thrust girls with eager minds and widening vision back into the exclusively domestic circle from which they have but recently emerged. This is to attempt the impossible, to revert to the social ideals and practices of the eighteenth century. Yet with entire seriousness, the theory is advanced as modern, being garbed in a dubiously scientific dress of biology and psychology. Therefore it must be met in all fairness on its own ground.

Some Evidence Concerning Sex Differences and Sex Variability.—The fundamental positions of Dr. Hall’s

¹ *Ibid.*, pp. 636-44.

school of thinkers are briefly, (1) that the male is the agent for variation and progress, whereas the female is the conserver of existing values; (2) that differences between the sexes "in every organ and tissue" extend to the mind in such wise that sex in mind is no less marked than sex in body; (3) that the health of high school and college women, especially with regard to menstruation, is unfavorably affected by pursuing the same intellectual program as that of men. Manifestly if these positions be grounded in fact the education of women must be differentiated from that of men for the sake of the women themselves, as well as in the interests of social well-being and advancement.

Let us, then, consider the first thesis—that the male is the agent of variation, whereas the female is by nature conservative. It is perhaps unnecessary to point out that this theory has been and still is widely held by biologists and psychologists. Yet it has been vigorously attacked within the last decade by certain psychologists on the basis of laboratory tests. The earliest assault, however, appears to have been made by Dr. Karl Pearson in 1897. In his interesting work, *The Chances of Death and Other Studies in Evolution*, Pearson devotes one chapter to an examination of the evidence in regard to anatomical variation in man and woman. Abandoning what he declares to be the mistaken method of testing variability by the frequency of abnormalities among the sexes he starts from the principle that "the comparative variability of the sexes ought properly to be tested by normal rather than by pathological variation."¹ He further holds that the method then in use of solving the problem of the rela-

¹ *Op. cit.*, Vol. I: 267.

tive variability of the sexes by an investigation of absolute variabilities is fallacious. Accordingly he tests the relative variability of the sexes in any organ or member by comparing their coefficients of variation as the true criterion. His investigations took the form of measurements of stature, weight, long and short bones, skull capacity, cephalic index, etc., in men and women. The data were obtained (1) by use of statistics already compiled, (2) by measurement of living men and women, (3) by post-mortem examinations and by measurement of bones taken from ancient tombs, crypts and cemeteries. Certain of the conclusions reached are quoted in full:

“(e) If we accept as a possible or indeed probable measure of significant variation the so-called coefficient of variation, i.e., the percentage variation, for cases in which the sexual means differ considerably, and the standard deviation for cases in which the means are practically identical, then there is in the material considered in this paper—and it appears to represent more cases of normal variation than have hitherto been treated quantitatively—no evidence of greater male variability, but rather of a slightly greater female variability. (f) Accordingly the principle that man is more variable than woman must be put on one side as a pseudo-scientific superstition until it has been demonstrated in a more scientific manner than has hitherto been attempted. (g) Those writers who find in this principle not only ‘social and practical consequences of the widest significance,’ but also an explanation of the peculiar characteristics of ‘the whole of our human civilization’ are scarcely to be trusted when they deal with the problems of sex.

“I would ask the reader to note that I do not proclaim the equal variability of the sexes, but merely assert that the present results show that the greater variability often claimed for man remains as yet a quite unproven principle. The numerous popular writers who have seized this principle as a text upon which to preach various social lessons are, in my opinion, starting from either a dogma or a superstition, and not from a result of genuine scientific

research. The 'sequacity' exhibited by the multitude of semi-scientific writers on evolution is possibly a sign of the very small capacity for intellectual variation possessed by the literary male."¹

After the publication of this much discussed study Havelock Ellis pointed out² that Pearson's evidence was largely invalidated by the fact that his measurements were solely of adults; hence the powerful influence of environmental factors had not been taken into consideration. Recognizing the justness of this criticism Dr. Leta Hollingworth and Dr. Helen Montagu made a study to determine the question: "Are male human beings inherently more variable in anatomical traits than female human beings?" The experiment consisted in making ten anatomical measurements on every infant born in the obstetrical wards of the New York Infirmary for Women and Children—20,000 measurements of infants at birth. The conclusions of the experimenters follow:

"If we take the gross A.D. as the measure of comparative variability we find that in six cases the males are more variable; in 4 cases the females are more variable.

"If we take the Pearson coefficient as the measure of variability we find that in six cases there is no difference in variability, when the P.E. of the coefficient is computed; in three cases the females are slightly more variable; in one case the males are slightly more variable.

"In all cases the differences in variability are very slight. In only two cases does the percentile variation differ in the first decimal place. In these two cases the variability is once greater for males and once greater for females."³

But, as Dr. Hollingworth has herself indicated,⁴ even if the greater variability of males in anatomical

¹ *Op. cit.*, pp. 376-7.

² *In Man and Woman*, p. 465.

³ *Amer. Jour. of Soc.*, XX: 364-5. 1914-15.

⁴ "Variability as related to Sex Differences in Achievement," in *Amer. Jour. of Soc.*, XIX: 514. Jan., 1914.

tive variability of the sexes by an investigation of absolute variabilities is fallacious. Accordingly he tests the relative variability of the sexes in any organ or member by comparing their coefficients of variation as the true criterion. His investigations took the form of measurements of stature, weight, long and short bones, skull capacity, cephalic index, etc., in men and women. The data were obtained (1) by use of statistics already compiled, (2) by measurement of living men and women, (3) by post-mortem examinations and by measurement of bones taken from ancient tombs, crypts and cemeteries. Certain of the conclusions reached are quoted in full:

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measurements were proven this fact "would only suggest, not prove, that there is greater male variability in *mental traits also.*" And in this field we have little exact evidence. From the data regarding sex differences in mental abilities compiled by Dr. Helen Thompson, Wissler, Gilbert, and others Dr. Thorndike estimated the percentages of males reaching or exceeding the median of females in each ability measured. With respect to sex differences he concludes: "The most important characteristic of these differences is their small amount. The individual differences within one sex so enormously outweigh the differences between the sexes in these intellectual and semi-intellectual traits that for practical purposes the sex difference may be disregarded."¹

But Professor Thorndike does not stop with a comparison of the central tendencies of the men and women tested. He goes on to consider the different *range* of ability in the sexes as shown by the graphs and states his own conclusion with great definiteness:

"The trivial difference between the central tendency of men and that of women, which is the common finding of psychological tests and school experience, may seem at variance with the patent fact that in the great achievements of the world in science, art, invention, and management women have been far excelled by men. One who accepts the equality of typical (i.e., modal) representatives of the two sides must assume the burden of explaining this great difference in the high ranges of achievement.

"The probably true explanation is to be sought in the superior variability within the male sex. The most gifted men may be superior to the most gifted women even though the average man is equal to or below the average woman, *if men vary widely enough from their central tendency.*"²

¹ *Educational Psychology*, Vol. III: 184.

² *Ibid.*, 187-8. 1914.

When it comes to a consideration of the evidence at hand in support of his conviction Professor Thorndike admits that it "is unfortunate that so little information is available for a study of sex differences in the variability of mental traits in the case of individuals over fifteen." With the data at hand, however, he feels justified in formulating the conclusion given above.

But what would such differences in mental variability mean when applied to the education of the sexes? Professor Thorndike leaves us in no doubt. In an article entitled *Sex in Education*,¹ he vigorously states his views on this question.

"This one fundamental difference in variability is more important than all the differences between the average male and female capacities . . . a slight excess of male variability would mean that of the hundred most gifted individuals in this country not two would be women, and of the thousand most gifted, not one in twenty. . . . Not only the probability and the desirability of marriage and the training of children as an essential feature of woman's career, but also the restriction of women to the mediocre grades of ability and achievement should be reckoned with by our educational systems. . . . Postgraduate instruction, to which women are flocking in large numbers, is, at least in its higher reaches, a far more remunerative investment in the case of men."

This is discouraging to advocates of equal sex opportunity. But discerning readers may feel that in judging the marked differences in sex achievements in science, art, literature and statesmanship, much importance should be attached to the handicaps under which women have labored in the past. One of these indubitable handicaps is indicated by Dr. Leta Hollingworth:

¹ *The Bookman*, XXIII : 218.

"For the geniuses . . . may be accounted for by the fact that woman's biological function of reproduction has so conditioned her that eminence in the fields where mental energy is publicly recognized has been extremely improbable."¹

This is true, but it is not all. Elizabeth Woodbridge presents another aspect of the matter:

"It ought to be noted that women being still under such different conditions from men, all experiments which show likeness between them and men ought to be given great weight, since this likeness must be existent in spite of considerable discouragement. . . . That women are still under different conditions from men may perhaps be challenged. Many women, it will be argued, have had excellent opportunities for development—more opportunities than many a newsboy who has risen to eminence. True, but equality of condition is not determined by material advantages alone. Good physical and mental training, good economic environment, these are not enough unless they are backed by what I may call, for lack of a better phrase, *a general attitude of expectancy*. The newsboy will serve as an illustration. . . . Whatever his goal, he knows that being a newsboy, though it constitutes a handicap, does not throw him out of the race. He knows that the world of men whose standards matter to him think of his chances in this way. They may not be actually thinking about him at all. But he knows that if, or when, they do think of him this will be their attitude. This I call the attitude of expectancy. A sheaf of sermons might be written on its workings.

"It is this which until very lately has been lacking to girls. With a girl there has been no question whether or not she 'has it in her.' It has been taken for granted that she hasn't it in her. . . . I agree entirely with Mr. George in thinking that this attitude of society makes more difference than all the material things which it may bestow or withhold. I believe, too, that it will be the last thing to change. . . . This attitude toward women, largely unconscious, implied rather than expressed, begins at birth, and stacks the cards for the whole game."²

¹ *Op. cit.*, p. 515.

² "The Unknown Quantity in the Woman Problem." *Atlantic Monthly*, CXIII : 512-13, April, 1914. Italics mine.

So much for the social handicaps which have unquestionably played their part in determining the relatively meagre achievements of women in intellectual, artistic and professional fields. But can we go further and challenge the theory of the greater inherent variability of men in mental abilities?

During the last eight years numerous experiments have been made, the conclusions of which in part contradict the results of Professor Thorndike's study. Dr. Leta Hollingworth has assembled this material, and has summarized the studies made by Wells, Strong, Meyers, and others. Not only do they tend to show that the hypothesis of greater male variability in mental traits is still unproven but certain tests seem actually to show greater female variability. However, in some instances the conclusions were based upon a small number of subjects and the evidence is conflicting.

One of the most recent studies of sex differences in mental variability is embodied in the *Stanford Revision . . . of the Binet-Simon Scale for Measuring Intelligence* made by Terman and others in 1917.¹ With regard to the variability of the sexes in mental range as determined by the distribution of Intelligence Quotients in 457 boys and 448 girls the writers declare:

"The facts we have presented indicate that, apart from a slight superiority of the girls, from 5 to 12 years, the distribution of intelligence is much the same for the sexes. There is no evidence of any wider range of intelligence among boys, such as has commonly been supposed to exist. The difference, if any exists, seems to be in the other direction. A slightly larger per cent. of girls than of

¹ Ch. IV.

boys falls to 75 or below, which is the point frequently taken as indicating feeble-mindedness, and a decidedly larger per cent. of girls reaches as high as 125. The range that includes the middle 50 per cent. is almost exactly the same in extent for the two sexes. This is all quite contrary to the traditional belief that both feeble-mindedness and exceptionally superior ability are more frequent with boys than with girls.”¹

But, as Dr. Hollingworth justly points out:

“Even if it were determined that men *actually do* vary more in mental traits than women do, still nothing would be proved regarding their *inherent* variability. In order to establish greater native variability of either sex it is necessary to show (1) that in the trait being distributed the opportunity and training of the sexes have been exactly equal, and (2) that in neither group has variability had more or less survival value than in the other group. . . . No measurements, especially mental measurements, of adults under the social customs which have obtained in the world of men and women fulfil either of our two necessary conditions. Men and women have devoted themselves to different activities because of the very different parts they play in the reproduction of the species. Women are under the biological necessity of bearing and rearing the children, and in the present almost as invariably as in the past, child-bearing has implied and compelled as a consequence the one occupation of housekeeping. Thus intellectual variability had no survival value for women, but rather the opposite.”²

The Influence of Sex upon Mental Abilities.—Let us turn now to the second position taken by the advocates of sex differentiation in education, namely, that sex exerts a powerful influence over mind as well as body. This statement may be construed in the light of Dr. Hall’s discussion to mean that sex affects women’s intellectual abilities and emotional reactions; and inferentially, at least, this hypothetical difference

¹ *Op. cit.*, p. 70.

² *Op. cit.*, p. 523.

is not to the advantage of women. With respect to the intellectual abilities of school children we have seen that Terman found a superiority in intelligence among the girls which, although not great in amount, extended over a considerable period of time. Therefore the investigators were led to compare their results with (1) the teachers' estimates of the intelligence of the two sexes, (2) the teachers' judgments of the quality of their school work, and (3) the age-grade distribution of boys and of girls for the ages 7 to 14 years. In the first two cases the teachers' estimates fully supported the results of the tests in showing slightly superior intelligence and quality of school work in girls up to 13 years of age after which the boys showed a slight advantage. In examining this fact the investigators noted that the age-grade distribution of boys and girls differed little up to the age of eleven, after which for three years the girls were clearly in advance, and at 14 the boys took the lead. But the fact that 57.6 per cent. of the boys were in the eighth grade at 14, whereas only 33.3 per cent. of the girls were in that grade aroused a suspicion in the minds of the investigators that a certain amount of selection had taken place in the 14-year-old group due to the fact that a considerable number had been promoted to the high school. They also surmised that this selection had occurred more often in the case of girls than of boys because "marked school acceleration occurs much oftener with girls than with boys at the ages 12 and 13 years." A study of the percentage of girls in the entire number of pupils in grades below the high school at each age revealed a sharp falling off of girls at the ages 13 and 14, whereas by "the laws of chance the number of boys and girls

found at each age ought to be nearly equal, barring selective influences." To quote the investigators:

*"The only possible conclusion seems to be that the apparent superiority of boys at the age of 14, as well as also their diminished inferiority at 13, is due solely to the unequal selection which has taken place at these ages."*¹

The final conclusions of the writers are summarized at the end of the study. Not only do they record their belief that the "small superiority of the girls in the tests probably rests upon a real superiority in intelligence, age for age" but, with reference to sex variability, they conclude: "Apart from the small superiority of the girls, the distribution of intelligence shows no significant difference in the sexes. The data offer no support to the widespread belief that girls group themselves more closely about the median or that extremes of intelligence are more common among boys."²

Sex Differences in Original Interests.—It should be noted, however, that most of the tests of sex differences in mental abilities which have been made up to the present have not been designed to measure differences in *emotional range and intensity or in fundamental taste and interest*. In short they have not brought out differences in "psychic attitude." There is some evidence to show that women's interests incline to the humanities rather than the sciences. Dr. Helen Thompson's study of the sex differences revealed by the tests of twenty-five men and twenty-five women students of the University of Chicago, show marked superiority of women in information about English literature and as marked an inferiority in information

¹ *Op. cit.*, pp. 73-77.

² *Op. cit.*, p. 83.

about physics. In ingenuity tests, likewise, the women were inferior to the men in four out of five tests. Thorndike also has estimated in the case of high school boys and girls, in the same classes, the percentage of boys reaching the median of the girls in selected studies. The percentages follow:¹

| | |
|--|----|
| In English (Regents' examination and school mark)..... | 41 |
| In mathematics (" " " " ")..... | 57 |
| In Latin (" " " " ")..... | 57 |
| In history (" " " " ")..... | 60 |

In the case of college students Thorndike's percentages are:

| | |
|-------------------------------|--------------|
| In English..... | 35 (approx.) |
| In mathematics..... | 45 (approx.) |
| In history and economics..... | 56 (approx.) |
| In mental science..... | 50 (approx.) |
| In modern languages..... | 40 (approx.) |

Thorndike likewise gives the results of Miss Rusk's extensive study of the grades received by boys and girls for scholarship in high school studies. The percentages of boys who reach, or exceed the median of the girls follow:

| | |
|--------------------|----|
| In English | 33 |
| In algebra | 41 |
| In geometry | 53 |
| In Latin | 29 |
| In history | 49 |
| In German | 34 |
| In chemistry | 58 |
| In physics | 61 |

An examination of the last results shows the girls strikingly superior in English and languages and about on an equality in mathematics, which is somewhat surprising in view of the time-honored theory that women

¹ See Thorndike, *Educational Psychology*, III : 182-184.

are deficient in mathematical ability. However, the girls seem almost as inferior in the sciences as they are superior in the humanities. But who can doubt that in any attempt to discover women's dominant tastes and interests by a study of school marks, a large allowance must be made for the influence of social conditions and social suggestion. It would be an incautious not to say unscientific student of the problem of sex differences who would maintain that women's excellence in and apparent preference for humanistic subjects rather than the pure and applied sciences are wholly due to inherent differences in interest and taste. For one has only to consider how rarely women's lives have brought them in contact with scientific principles and their applications in modern industry to realize that circumstances have combined to discourage scientific proficiency in women and to encourage in them a "lady-like" acquaintance with literature and art. Add to this the fact that almost no incentive has ever been given educated women to enter the vocations based upon applied physics, chemistry, biology, and mechanics and a long stride has been made in accounting for feminine indifference to the sciences.

Sex Differences in Temperamental Traits. — But this does not dispose of the question concerning inherent emotional differences in the sexes which might have a profound influence upon their interests and preferences. In this connection Thorndike cites the study made by Heymans and Wiersma of the temperamental traits of men and women, based on the estimates of other individuals who knew them more or less intimately. The probable percentage of men reaching the median woman in respect to these traits has been

calculated by Thorndike and selections from the results are given below:¹

| | PERCENTAGE OF MEN WHO EQUAL OR EXCEED THE MEDIAN WOMAN |
|---|--|
| In interest in persons more than in things..... | 15 |
| In emotionality | 30 |
| In temperance in use of alcoholic drinks..... | 30 |
| In independence | 70 |
| In desire for change..... | 32 |
| In impulsiveness | 34 |
| In quickness of recovery from grief | 66 |
| In activity (of the aimless sort)..... | 36 |
| In dissatisfaction with oneself..... | 36 |
| In religiousness | 36 |
| In excitability | 37 |
| In sympathy | 38 |
| In patience | 38 |
| In love of sports..... | 62 |
| In humor | 61 |
| In vanity of person..... | 40 |

Obviously the most striking difference that emerges from these figures is the small percentage of men who equal or exceed the median woman in their interest in *persons rather than in things*. Scarcely less striking are the differences in emotionality, impulsiveness, excitability, desire for change, aimless activity, and vanity of person, which are all in favor of the men, as are the differences in independence, love of sports, and sense of humor. Only in temperance, sympathy, patience, dissatisfaction with self, and religiousness have women the advantage. But do not these contrasts in themselves point to their explanatory causes, at least in part? May these not be found in large measure in the sharp contrasts in the life experiences of the two sexes? Men are more independent not only because they have always held the purse-strings (an all-powerful aid to independence) but because their life work

¹ *Op. cit.*, III: 200-205.

has challenged self-reliance. And may it not be said that the life careers of men, far more often than in the case of women, afford variety, interest, contact with live social, economic, and political problems, and opportunities for initiative and original work—all of which have afforded outlets for emotion, impulse and excitability, and have greatly reduced desire for change and aimless activity? The life and work of women in the home, limited in range of interest, monotonous and exacting in character to a large extent, and concerned almost wholly with personal relationships in the family and neighborhood, furnish precisely the environment to develop in women patience, sympathy, desire for change, and recourse to aimless activity in leisure time. Moreover the emotionality and excitability of men, which have not found outlets in their work, are very often brought home to be soothed away by the affectionate sympathy of the wife or mother who may herself have passed through a trying domestic day with no one to serve as a buffer between herself and an exasperating world. Until women choose their field of work and have the same opportunity for self-development and self-expression within it as their brothers have, it seems idle to estimate temperamental differences, which may in generous measure, if not wholly, be explained by the diverse life experiences and training of the two sexes from babyhood. Again it must be remembered that few exact tests of the temperamental traits of the sexes have been made; and such as exist are in part based on doubtful evidence—that of the opinions of individuals. However, Ellis has assembled some evidence which seems to point to the greater affectability of women as shown by the sensitivity of

their vaso-motor and involuntary muscular systems to stimuli.¹

Dr. Thorndike fully recognizes that differences in the emotional traits measured above may well have been produced by circumstances, but he holds that "the sex differences in the *instinctive* acts, interests, aversions, and emotional responses should be studied apart from" such differences. He declares that the "most striking difference in instinctive equipment consists in the strength of the fighting instinct in the male and of the nursing instinct in the female. No one will doubt that men are more possessed by the instinct to fight, to be the winner in games and serious contests, than are women; nor that women are more possessed than men by the instinct to nurse, to care for and fuss over others, to relieve, comfort, and console. And probably no serious student of human nature can doubt that these are matters of original nature."²

This statement may be grounded upon rock-ribbed truth, but it is a little difficult to discover by what scientific method the author has arrived at his conclusions. It is true he refers to the fact that "the existence of these two instincts has been long recognized by literature and common knowledge, but their importance in causing differences in the general activities of the sexes has not." In Thorndike's opinion the fighting instinct in man "is in fact the cause of a very large amount of the world's intellectual endeavor," whereas the maternal instinct "is the chief source of woman's superiorities in the moral life." But do these declarations, grounded as they admittedly are on empirical evidence, constitute scientific knowledge? Is it

¹ Ellis, *Man and Woman*, Ch. XIII.

² *Op. cit.*, p. 202.

not at least conceivable that the apparent difference in intensity of these two instincts in men and women is explainable on precisely that theory of difference in circumstances and hence of stimuli which Thorndike unreservedly recognizes in the case of the other temperamental traits but rules out in this instance? Who can doubt that woman's nurturing instinct has been socially selected or that her fighting instinct has not? No less does the converse appear to be true in the case of men. *This is not to deny that these instinctive differences exist;* but only to point out that their existence cannot be demonstrated by an appeal to "common knowledge" which has so conspicuously been demonstrated to be prejudiced and unreliable in matters relating to woman's original nature.

Is the Higher Education of Women Prejudicial to Health?—There remains for consideration the claim of Dr. Hall and others that "it is, to say the very least, not yet proven that the higher education of women is not injurious to their health."¹ In arriving at this conclusion Dr. Hall has examined two kinds of evidence: (1) that furnished by physicians on the basis of their treatment of adolescent girls, and (2) that afforded by questionnaires sent out to a large number of college women after graduation. Much of the former evidence cited by the author seems not to bear directly on the question of the effect of higher education upon the health of women. Many physicians are content to record their conviction that ample out-of-door exercise and sound instruction in sex hygiene, especially with respect to menstruation, should be provided for adolescent girls if they are to be properly prepared

¹ *Adolescence*, II : 589.

for motherhood and if the race is not to degenerate. Surely no sensible person can take issue with this opinion. But Dr. Hall quotes approvingly the views of certain other physicians who look askance upon women's higher education as directly prejudicial to health and motherhood. Thus he cites the opinions of Dr. Storer in his work on *Female Hygiene*, published in 1871, to the effect that delicate girls frequently are ruined both in body and mind by school life and work. Again he quotes Dr. Beard's indictment based on a study of the returns to circulars sent out to girls' schools: "Nearly everything about the conduct of the schools was wrong, unphysiological and unpsychological. . . . It was clear that the teachers and managers of these schools knew nothing of and cared nothing for those matters relating to education that are of the highest importance. . . . Everything pushed in an unscientific and distressing manner, nature violated at every step, endless reciting and lecturing and striving to be first—such are the female schools of America at this hour."¹

So much for the medical evidence. The observant reader will doubtless note that most of it was recorded thirty or forty years ago when the effect of higher education upon the health of young women was far more a live issue than it is to-day. Yet Dr. Hall, writing in 1907, attaches great importance to these opinions on the ground that "the doctor's objective and personal tests and opinions are nearer the truth" than are questionnaire returns in this field which are likely to be vitiated by the fact that college women will be reluctant to confess to ill health if such confession may "con-

¹ Hall, *op. cit.*, p. 570-71.

tribute to increase the prejudice against the cause of education which she has dearly at heart."¹

Doubtless questionnaires are open to this criticism, as well as to the further objection that women may not be able accurately to recall and judge of their health and its symptoms after the passage of years. But is not an even more serious objection to be raised against the opinions of physicians? As Dr. Hollingworth has pointed out, "it should be obvious to the least critical mind that *normal* women do not come under the care and observation of physicians." These men would seem to be precisely the individuals least fitted by the nature of their experience with a selected group of invalid or semi-invalid women to judge of the effects of higher education upon the many.

The evidence furnished by questionnaires may be briefly summarized. Most valuable and oft-cited is the investigation undertaken by the Association of Collegiate Alumnae in 1884, the results of which were published the following year by the Massachusetts Bureau of Labor Statistics.² The questions included in the inquiry covered the three main heads of (1) childhood conditions, (2) individual health, and (3) tables of comparison. The questionnaire was sent out to 1,290 women graduates of twelve colleges and universities and replies were received from 705. The results may be summed up in general as follows:—

| | PERCENTAGE IN EXCELLENT OR GOOD HEALTH | PERCENTAGE IN FAIR HEALTH | PERCENTAGE IN POOR OR BAD HEALTH OR DEAD |
|--------------------|--|------------------------------|--|
| At entering..... | 78.16 | 1.98 | 19.86 |
| During college ... | 74.89 | 7.80 | 17.31 |
| Present health... | 77.87 | 5.11 | 17.02 |

¹ *Ibid.*, p. 589.

² *Health Statistics of Female College Graduates*, Sixteenth annual Report of Mass. Bureau of Statistics of Labor, Boston, 1885.

The comparison tables further showed that 138 young women, or 19.6 per cent., reported a deterioration in health during the college period; 418, or 5.93 per cent., no alteration; 149, or 21.1 per cent., an improvement. Thus there were nearly 2 per cent. more students in the group that showed a gain in health than in the group reporting a loss. Moreover, as Dewey has pointed out, of the 138 students whose health had deteriorated, 42 reported a decline from excellent to good, which probably represents a slight change. The causes of the disorders reported by 417 out of the 705 women are noteworthy:

| | |
|-------------------------------|-----|
| Constitutional weakness | 137 |
| Bad sanitary conditions | 81 |
| Intellectual overwork | 81 |
| Emotional strain | 73 |
| Physical accidents | 47 |

The part played by overstudy in producing ill health seems not to have been very great, although twenty per cent. of those studying severely reported poor health as against 15 per cent. of those studying moderately. 438 students, or 62.13 per cent., studied moderately; 64, or 9.08 per cent., between moderately and severely, and 199, or 28.22 per cent., severely. With regard to worry as a factor in ill health the following figures are interesting. Twenty-four and four tenths per cent. of the students worried over their studies; 12.62 per cent. worried over personal affairs; 18.58 per cent. worried over both studies and personal matters; and 44.4 per cent. worried over neither. Of those who had no worries 92 per cent. were in fair or good health. The tables seem to show, then, that worry was the most potent of all the predisposing causes of disease among these students.

Summing up the evidence Professor Dewey remarks:

"These returns for the most part tell their own tale and point their own moral. They certainly bear out the conclusion drawn regarding the uninjurious effect of collegiate study. Their great defect is in their failure to show more definitely the conditions and surroundings of college life. The physical, social, and moral environment should be carefully studied. It has long been a commonplace of vital science that intellectual pursuits for men *per se* are healthy. The question which needs solution is: What conditions prevent their being equally healthy for women, the exact part played by each factor, and how far it is removable?"¹

Commenting on the same figures Carroll D. Wright says:

"The graduates, as a body, entered the college in good health, passed through the course of study without material change in health, and since graduation, by reason of the effort required to gain a higher education, do not seem to have become unsuited to meet the responsibilities or bear their proportionate share of the burdens of life. It is true that there has been, and it was to be expected that there would be, a certain deterioration in health on the part of some of the graduates. On the other hand, an almost identical improvement in health for a like number was reported, showing very plainly that we must look elsewhere for the causes of the greater part of this decline in health during college life. If we attempt to trace the cause we find that this deterioration is largely due, not to the requirements of college life particularly, but to predisposing causes natural to the graduates themselves, born in them, as it were, and for which college life or study should not be made responsible."²

The statistics collected by the Association of Collegiate Alumnae not only aroused much interest and interpretative comment in this country but they suggested a similar investigation of the health of women

¹ See Dewey's analysis of the statistics collected by the Association of Collegiate Alumnae in his article on "Health and Sex in Higher Education," in the *Pop. Sci. Monthly*, XXVIII 606-614.

² Sixteenth Report of the Mass. Bur. of Labor Statistics, p. 63.

students at Oxford and Cambridge. The English committee conducting the investigation improved upon the method of the American Association by instituting a parallel inquiry in regard to the health of the sisters of the English students who were not in college. In order to make the conditions of the parallel research as nearly as possible the same, the sister nearest in age, or failing a sister the first cousin, of the college woman was selected and a set of questions was sent to her similar to that furnished the students. We are indebted to the English report for a table of comparison of the health of American and of English students and of the sisters of the latter at various periods of life, including the college stage. The report is given below:

TABLE SHOWING PERCENTAGE IN EXCELLENT OR GOOD HEALTH

| | American students (705) | English students (566) | English sisters (450) |
|---|----------------------------|---------------------------|--------------------------|
| From 3 to 8 years of age..... | 76.74 | 71.45 | 64.70 |
| From 8 to 14 years of age..... | 73.33 | 67.09 | 63.45 |
| From 14 to 18 years of age..... | | 61.97 | 56.34 |
| At entering college | 78.16 | 68.20 | |
| During college life and for sisters 18 to 21 years | 74.89 | 63.08 | 58.45 |
| Present health | 77.87 | 68.02 | 59.34 |

Rather surprisingly the health of American students proved to be better than that of their English cousins and even more superior to that of the English girls who did not go to college. Of course the inferiority in health of the last named group may have been and probably was a determining factor in their decision not to enter college. Nevertheless the superiority in health of the college women during their years of study is noteworthy as the figures show:

| | American | | English ¹ | |
|--------------------|----------|------------|----------------------|------------|
| | Number | Percentage | Number | Percentage |
| Deteriorated | 138 | 19.57 | 78 | 20.73 |
| Improved | 149 | 21.13 | 51 | 15.54 |
| No change | 418 | 59.29 | 199 | 60.67 |

Of the 78 cases in the English group reporting deterioration in health in college 65 cases were shown to be slight whereas 8 were more serious. The deterioration was merely temporary in 36 cases. In regard to these cases the English report concludes that the "temporary falling off during college life of about five per cent in good health, compared with either health at entering or present health, to some extent depends on illness or other things occurring accidentally during the college course, and to some extent is probably due to the relaxing climate of our universities; but it is also partly caused by overwork and want of attention to well-known laws of health, and to this extent both could and ought to be prevented by reasonable care on the part of the students themselves."²

There can be no question that the value of the American study was materially lessened by the fact that no control records were made of the health of sisters or cousins who did not go to college. The English report repaired this omission and at least suggests that a similar comparative study of the health of the college and non-college women in America would show results equally favorable to the college student. In 1895 a comparison of the health of women and men students was furnished by Preston in his study of the *Influence*

¹ In this table the figures relate only to the 328 English students who were in college for three years or more.

² See Alice Hayes, "Health of Women Students in England," in *Education*, January, 1891, pp. 284-93. The foregoing is a digest of the report of Mrs. Henry Sidgwick on *Health Statistics of Women Students of Cambridge and Oxford*.

of College Life on Health. Preston found that of over 200 college girls only 2.75 per cent. dropped their work because of ill health as compared with 2.85 per cent. of Amherst college men. The study, however, was too limited in numbers to be of much value.

The critic of higher education for women may point out at this juncture that the evidence given above was collected many years ago and may be totally contradicted by existing facts. This cannot be gainsaid. Yet it is highly probable that the reason no recent studies of the health of women college students have been made is precisely because the question is not a live issue in this year of our Lord 1923. Women have demonstrated to the satisfaction of most individuals that they are capable of carrying on four or more years of higher study without detriment to health. Especially is this true in those colleges where deans and matrons are appointed to have oversight of the social life and health of students and where ample provision is made for gymnastic training and out-of-door sports.

Effects of Functional Periodicity upon the Efficiency of Women.—There remains for brief consideration the special question of the effect of the menstrual period upon the physical and mental efficiency of college women—a matter on which Dr. Hall and his supporters lay greatest stress. Maudsley, writing in 1874, says on this point in comparing men and women:

“This is a matter of physiology, not a matter of sentiment; it is not . . . a question of two bodies and minds that are in equal physical condition, but of one body and mind capable of sustained and regular hard labor, and of another body and mind which

for one-quarter of each month, during the best years of life, is more or less sick and unfit for hard work.”¹

Perhaps the most striking characteristic of the foregoing statement is its complete ignoring of the fact that since the dawn of human history women have engaged in hard and often continuous toil from morning till night in their own households. The most meagre study of the history of woman’s life and the most casual survey of the manuals of household industry prepared for her use from the seventeenth century onward would serve to convince a resolute sceptic that women have performed a vast amount of exacting physical labor for many centuries. Half sick or not, they have been forced to keep their households running smoothly, and *they have done so*. Moreover the scholastic records women have made in the field of higher education and the honors they have won would seem to disprove the claim that they were “unfit for hard work.”

Another author holding similar views to those of Dr. Hall is Havelock Ellis. He writes with conviction of “a monthly physiological cycle which influences throughout the month the whole of a woman’s physical and psychic organism. Whatever organic activity we investigate with any precision, we find traces of this rhythm. While a man may be said, at all events relatively, to live on a plane, a woman always lives on the upward or downward slope of a curve.”²

Not a great deal of statistical and experimental evidence showing the effect of the menstrual period on

¹ *Sex in Mind and Education*, p. 29.

² *Man and Woman* (1904), p. 284.

women's physical and mental powers exists at present. The investigation made by the Association of Collegiate Alumnae disclosed the fact that of 705 women students 239 abstained from physical work, 2 from mental and 73 from both, during their periods. The study also disclosed that 53 per cent. of the students were subject to pain and irregularity in the years before entering college, 66 per cent. during college life and 64 per cent. after graduation. Apparently those young women who entered college four or five years after the beginning of menstruation fared better in the matter of health than those who entered one or two years after. The figures show that of those beginning college work at sixteen or less 28 per cent. deteriorated in health and 17 per cent. gained; of those who entered over twenty, 18 per cent. lost and 28.5 per cent. gained. An inquiry concerning the number who abstained from study during their periods brought out that 55 per cent. abstained in women's colleges and 25 per cent. in coeducational institutions,—a striking contrast in numbers!¹

The above figures furnish important evidence that in the case of American girls a distinct gain to health is secured by entering college several years after the menstrual function has begun. On the other hand, the study of the *Health Statistics of Women Students of Oxford and Cambridge* made in 1885 shows that the average age for entering college in England was 21.9 years, whereas in America it was 18.35 years—more than three and a half years earlier. Yet the health of American girls at entrance and during the college

¹ See the summary of the Association's statistics in Dewey's article, *op. cit.*, p. 611.

course was, on the whole, better than that of their English cousins.¹

With regard to the number of girls refraining from study or exercise during their periods, it should be said that a time-honored tradition has prevailed that girls are incapacitated at such times and should remit work in the interests of health. It is highly probable that some girls refrain from study simply because of the force of this traditional idea and of the advice they have received in accord with it. This is the opinion of Dr. Clelia Mosher who, after giving the whole subject of functional periodicity years of careful investigation, has published her conclusions in the brief work *Health and the Woman Movement*,² to which more detailed reference will be made later.

In a valuable study of *Functional Periodicity*,³ Dr. Leta Hollingworth cites an experiment made by the Russian Voitsechovsky, who tested six women daily for a considerable period of time in order to discover the effect of menstruation upon certain mental processes. He concluded that the menstrual period has an unfavorable effect upon women's mental activity. More specifically, his results show that the average time of choice reaction is lengthened, and its average variation increased; concentration is weakened, especially in its qualitative aspect; free association is somewhat arrested; and the capacity for mental work is lowered. Commenting on these results Dr. Hollingworth points out that only the graphs were presented as evidence by Voitsechovsky, whereas the complete data were needed to show their reliability.

¹ See above, p. 109.

² National Board of Y.W.C.A., New York, 1916.

³ Teachers College, Columbia University Contributions to Education.

Two other defects in the experiment were (1) the fact that all the subjects understood the nature of the experiment and thus might have been influenced by the realization that they were being tested at a crucial moment; and (2) no control tests were made of individuals not subject to the menstrual function. Moreover Dr. Hollingworth records it as her opinion that "the graphs presented by Voitsechovsky scarcely bear him out in his conclusions. It is at least questionable whether the critical periods could be located on these curves if they were drawn entirely solid without any indication on the graphs themselves as to where the periods fall, and submitted to a number of judges."¹

In view of the unquestionable need of further exact studies to determine the influence of the menstrual function upon women's motor and mental reactions, Dr. Hollingworth experimented with eight subjects—six normal women and two men—giving a rigidly conditioned series of tests covering a period of three or more months. The tests were given daily at the same hour, at first singly and thereafter twice a day. In the latter case the record was the average of two trials. Two motor tests were given—the tapping test and a steadiness test; and two mental tests—color naming and saying opposites. Further tests were added of motor fatiguability and of speed and accuracy in typewriting. The two men received the tests in precisely the same way as the women and thus furnished a much needed control record.

In addition to this intensive experiment Dr. Hollingworth made a more extensive study of seventeen wo-

¹ *Op. cit.*, pp. 8-9.

men of Teachers College who volunteered their services for the experiment. Only three of the former tests were used, the tapping, the steadiness and the opposites test. Instead of being given daily the tests were made only on every third day for a period of thirty days, thus yielding ten records and including at least one menstrual period.

The results of both the intensive and extensive experiments are striking and are quoted in full:

- “(1) Careful and exact measurement does not reveal a periodic mental or motor inefficiency in normal women.
- “(2) No part of the period is affected.
- “(3) Physical suffering seems to affect associational processes adversely, judging from the two instances here recorded where suffering was experienced on the first day.
- “(4) The variability of performance is not affected by functional periodicity.
- “(5) No regularly recurring period of maximum efficiency within each month is discernible.
- “(6) The ‘cycle’ referred to by Ellis and others is not discovered by methods of precision.
- “(7) No agreement is established between curves plotted for pulse, blood pressure, temperature, caloric radiation, etc., and the curves of work for the mental and motor traits here tested.

“It is astonishing how little support is found in these results for the statements quoted earlier in this paper. It is difficult to understand such striking disparity between what has been accepted and the figures yielded by scientific method.”¹

It may be freely admitted that *these findings do not establish the theory that women suffer no loss of mental and motor ability during their menstrual periods.* The experimenter herself points out that an insufficient number of subjects were tested; that only normal women were included in the experiment and that the

¹ *Op. cit.*, pp. 94-5.

study does not cover all phases of the question of the mental and motor abilities of women during menstruation. Granting these facts, however, this experiment represents a gratifying attempt to substitute exact scientific methods for mere opinions with regard to a moot question of the utmost importance in the education and life work of women. It is to be hoped that further studies, embracing much larger numbers of subjects, and a wider range of mental and motor tests may be available in the near future.

In summarizing the conclusions of this chapter it may be said that the positions taken by Dr. G. Stanley Hall and numerous other writers appear to be grounded far more upon opinion than upon experimental evidence. More specifically, their claims that the male is the agent of variation and progress; that physiological sex differences are paralleled by mental sex differences; and that the health of young women, especially during functional periodicity, is adversely affected by a college course, have by no means been established. On the contrary, such scientific evidence as exists rather undermines than supports such positions.

What, then, would seem a reasonable answer to the question, Shall there be sex differentiation in education? Would it not be found in a straightforward recognition of the fact that women are individuals in the same sense as men; that education should develop their tastes and aptitudes and specialized training should fit them for their work in the world—be it home-making or journalism—precisely as in the case of men? President Thwing has given clear expression to this idea when he says:

"That study is precious which *finds* the student . . . Therefore, one can say, and at once, that the woman as a woman, should not take studies different from those that a man takes. One can also say that the man, as a man, should not take studies that are different from those that a woman takes. One can say at once, and firmly, that woman should take those studies which interest and move and form her. . . . The studies should be different, not on the ground that the one is a man and the other a woman, but they should be different on the ground that each is an individual."¹

SELECTED READINGS

ADLER, FELIX, "The Differentiation of Higher Education for Women." *Jour. of Assoc. of Coll. Alum.* April, 1912.

ELLIS, HAVELOCK, "Man and Woman," Ch. VIII. Scribner's; New York, 1904.

GORDON, KATE, "Wherein should the Education of Women Differ from that of Men?" *Sch. Rev.* XIII: 789-94. December, 1905.

HALL, G. STANLEY, *Adolescence*. Vol. II, Ch. XVII. D. Appleton & Co., 1907.

HALLER, WM., "Alien Essences." *Col. Univ. Quarterly*, XIX:44-55. December, 1916.

HOLLINGWORTH, LETA S., "Variability as related to Sex Difference in Achievement." *Amer. Jour. of Soc.*, XIX: 510-30. 1913-14.

MEARKLE, A. L., "Sex in Education." *Arena*, XXIV: 206-14. August, 1900.

PARRISH, C. S., "Should the Higher Education of Women Differ from that of Men?" *Educ. Rev.*, XXII: 383-90.

SMITH, MARY R., "Shall the College Curriculum be Modified for Women?" *Jour. of Assoc. of Coll. Alum.*, pp. 1-15. December, 1898.

THOMAS, M. CAREY, "Shall the Higher Education of Women Differ from that of Men?" *Ed. Rev.*, XXI: 1-10. January, 1901.

THOMAS, HELEN BRADFORD, "The Mental Traits of Sex." Univ. of Chicago Press, 1906.

THORNDIKE, E. L., "Sex in Education." *Bookman*, XXXIII: 211-14, April, 1906.

THORNDIKE, E. L., *Educational Psychology*. III: 182-205.

THWING, C. F., "Should Woman's Education Differ from Man's?" *Forum*, XXX: 728-36, February, 1901.

¹ Thwing, *The American College*, pp. 229-30.

CHAPTER IV

SEX DIFFERENTIATION IN EDUCATION FROM A SOCIAL VIEWPOINT

The Social Argument for Sex Differentiation.—The readers of the preceding chapter will no doubt be prepared at this point to declare that a question so complex as that of adapting education to sex differences cannot be satisfactorily treated from the standpoint of individual capacities alone. And such, indeed, is the case. So many-sided a problem should be approached from the point of view of the social situation and need, no less seriously and impartially than from the side of personal abilities. It will, then, be the purpose of this chapter to set forth certain conflicting views growing out of a social approach to the problem and to seek some plan of compromise or reconciliation.

The case for a very considerable body of thoughtful men and women—probably at present a majority—has been often presented in literature and by word of mouth. President Hyde of Bowdoin College has been an appealing spokesman for this influential group and a reflective consideration of his ideas may assist us in clarifying our own views upon a difficult controversial question. At the outset President Hyde attacks the mistaken notion that men and women should have the same education, the same tasks, and payment in the same coin. Boldly he raises aloft the banner of the

“Womanly Ideal,” which, if fulfilled, will give us “a deepening of the differences between men and women.”¹

And of these differences one of the most fundamental is that of the economic function of men and women. With few exceptions “the manly economic ideal is the effective direction of production; the womanly ideal is the beneficent ordering of consumption.” Woman’s distinctive economic contribution lies in the household realm, in the preparation and serving of food, in the clothing of her family, in the nurture and individual training of her children. And Dr. Hyde generously declares his conviction that this is no less honorable a work than commerce or transportation. Moreover he harbors no doubt that it is one “for which women are by nature and taste eminently fitted.”

But the author very frankly faces the fact that millions of women are pouring into the ranks of industry, compelled to earn the whole or a part of their living. What kind of employment shall they seek? In President Hyde’s opinion women should not enter the arena of “conjunctive production,” i.e., production determined by world forces and carried on in competition with other large producers for the general market. Rather let woman’s be the more quiet fields of production for immediate consumption, examples of which are nursing, teaching, medicine, domestic service, acting, typewriting, and factory work. In such callings she can succeed without loss of the spirit of service for others, of loving devotion, which is so essential a part of the “Womanly Ideal.” But if she insists on pushing her way into the exclusively masculine sphere of large

¹ *The College Man and the College Woman*, (1906), Ch. X.

scale production she is "doomed to financial failure." Under the conditions of ruthless competition, of fraud and deception, of asking and receiving no quarter, which prevail in big business enterprises, not one woman in a million could hold her own without physical or moral deterioration. Men, however, manage to make a success in this maelstrom "without a very large proportion of physical breakdowns, and without the destruction of their personal character." It would be interesting to know President Hyde's reasons for believing that so bitter a competitive struggle as that involved in mass production under present conditions works no moral harm to the man while it spells ethical disaster for the woman. None, however, are forthcoming.

According to our author, "the beneficent ordering of consumption" is woman's function no less in the intellectual than in the economic sphere. What, then, should be the womanly ideal in scholarship; what is the "beneficent ordering of intellectual consumption?" Needless to say Dr. Hyde emphasizes the *appropriation*, on the part of women, of the best that science literature, art, and nature have to offer and "interpretation and expression of these things so that they may become interesting and enjoyable to others." Productive scholarship, the creative gift, is so rare in women as to be almost negligible. In the few instances where it undoubtedly has been bestowed upon her she should seriously ask herself whether she can afford to follow its leadings at the risk of happiness. For woman's true happiness lies in radiating joy among her family and friends. Men are judged by what they do, women by what they are. "Man's intellectual

work is done like the work of a mill-stream, by conscious and deliberate direction. Woman's intellectual work is done chiefly like that of the sun—by unconscious and unpretentious radiation."

The sharp distinction between the functions of man as producer and those of woman as consumer extends not only to the economic and intellectual fields but to the political as well. Since women are (or should be) appreciative and discriminating consumers of the benefits of good government, their intelligent interest in and frank criticism of existing conditions are "most welcome." But constructive and organizing work in politics, the enactment of laws, the shaping of public policy and the conduct of diplomacy are, by edict of Nature, the sphere of the productive male. Women are given to understand that this is "rough work" which, again, men can perform without serious impairment of character but which women cannot touch without a moral deterioration that is mournful to contemplate and wholly destructive of the feminine ideal of loving, unassuming service in the home.

This sex division of society into a producing and a consuming group President Hyde confidently holds to be "grounded in an eternal distinction of nature which runs infinitely deeper than any question of merely formal right." Therefore in education, as in industry and in politics, "our aim henceforth should not be toward a stupid equality, with interchange of imitated functions, but toward differentiation,—giving as far as possible the direction and control of economic production to strong and forceful men, and the superintendence and ministry of consumption to wise and gentle women; giving for the most part the hard, dry

task of scholarly investigation and formulation to the absorbing and protracted toil of men, and the appreciation of results and the impartation of established knowledge to the quick wits of women; giving the strife and turmoil, the compromise and diplomacy of politics to the firm will and sound judgment of men, and the things that make a country worth dying for to the warm hearts of our women.”¹

Six years after this eloquent plea was written, Dr. Harvey, President of Stout Institute, entered the field of controversy, employing much the same weapons. He, too, is firmly convinced that the work of men and women for society is sharply differentiated; therefore it is an absurdity to give them the same education. Educators have at last seen the necessity of viewing education from the standpoint of the needs of society and of the state. This has led to an intelligent attempt to find out what men need to know and definitely to fit them to do their work in the world. The outcome has been an immense broadening of the field of educational opportunity for men. No less is it necessary to study the education of girls with seriousness and from the same social standpoint. “What a woman needs to know and to do in order to meet the responsibilities that come to her in life is the basic element in determining what her education shall be.” It is a waste of time and energy to fit women for many kinds of work which can only be performed by men. Moreover, the call for efficiency is heard from one end of this broad land to the other—“a demand that educational effort shall be directed toward preparing . . . millions to do something well that needs to be done in order that they

¹ *The College Man and the College Woman* (1906), pp. 216-17.

and society may be benefited by their increased efficiency in doing."

Now, if we look about us, we see that the girl who is being educated to-day is the home-maker of to-morrow. The home is a universal institution and more than three-fourths of the women of America sooner or later assume the responsibilities of home-making after marriage. The problems of intelligent care and nurture of children, proper feeding of the family, household sanitation, home-furnishing and decoration, and the development of the mental and spiritual powers of children—these are questions that might well tax the wisest minds. They have been women's problems since the beginning of organized society and they will continue so to be. Girls can no longer secure the necessary knowledge and training to meet these problems in their own homes; therefore such education must be furnished in the schools, even if its introduction means "the elimination of some subjects from the curriculum which girls have been required to study . . . upon the theory of general culture and training." The woman is the home-maker; the well-being of the nation depends upon her efficiency in the home; and that efficiency is wholly dependent upon specialized training.¹

Facts Opposed to Sex Differentiation.—It is hardly necessary to say that these are searching arguments resting upon a basis of fact. True it is that a large proportion of women marry and become efficient or inefficient makers of homes. Preliminary figures issued by the United States Census Bureau for 1920 show that of females between the ages of 35 and 44 years 80.3 per cent. are married. Moreover, the total percentage

¹ "The Education of Girls," in *Jour. of the N.E.A.*, July, 1912, pp. 425-36.

of married females fifteen years of age and over has increased in the decades from 1890 to 1920 from 56.8 per cent. to 60.6 per cent. The marriage rate for the country at large, then, is increasing.

But is this the whole story? A study of the Census Reports shows that, although the marriage rate for the entire United States reveals a steady increase during three decades, yet in certain industrial areas there has been a more or less conspicuous decline in the number of marriages per 10,000 of the population. The industrial states of Massachusetts, Rhode Island, Connecticut, and Ohio—the only states having complete marriage records for the decades 1870-1900 show a marked falling off in the marriage rate.¹

| STATE | 1870 | 1900 |
|---------------------|------|------|
| Connecticut | 91 | 77 |
| Massachusetts | 103 | 86 |
| Rhode Island | 109 | 87 |
| Ohio | 96 | 91 |

Moreover the percentage of single females 15 years of age and over is 32.8 in urban communities as compared with a percentage of only 26.6 in rural communities. Compare this last with the percentage of single females in the following large industrial cities.²

| | | | |
|--------------------|------|-------------------|------|
| Boston | 40. | Pittsburgh | 35.1 |
| New York | 36.3 | Minneapolis | 37.3 |
| Philadelphia | 35.2 | Milwaukee | 35.5 |
| Baltimore | 35.8 | Omaha | 34. |
| Cincinnati | 35.7 | St. Louis | 32.7 |
| Chicago | 33.1 | Newark | 32.6 |

These figures would seem to indicate pretty clearly that the economic conditions in our populous cities,

¹ *Special Census Report on Marriage and Divorce, 1909*, p. 14.

² *U. S. Census for 1910: "Abstract of Marital Condition."*

where large numbers of women, skilled and unskilled, are engaged in paid employment outside of the home, are not favorable to high marriage rates.

The steady and increasing influx of women into gainful occupations is, of course, one of the most striking phenomena of the twentieth century. Whereas only 17.4 per cent. of all females ten years of age and over were gainfully employed in 1880, 18.8 per cent. were so employed in 1900 and 23.4 per cent.—a marked advance—in 1910. It is surely a noteworthy fact that of all the women in the country between the ages of 21 and 44 years more than *one-fourth*—26.3 per cent.—are pursuing paid employments.¹ To be sure this is a large age-group and the percentage is no doubt materially raised by the inclusion of the younger women. An age-group of women 35–44 years would probably show a sharp falling off in the percentage of women gainfully employed owing to the large number who had married.

In this connection, however, it is well to remember that the proportion of *married women* carrying on paid employments outside the home is steadily rising. Since issuing the Census of 1910, the Bureau of the Census has compiled some further statistics concerning married women in gainful occupations in the United States. These figures were released in 1917 and they tell an interesting tale. To quote from the Report:

“In 1890 the married formed 14.3 per cent of all women 16 years of age and over engaged in gainful occupations. In 1900 this proportion had increased to 15.9 per cent; and then, from 1900 to 1910 it jumped to the very high and entirely unprecedented proportion of 25.4 per cent.”

¹ U. S. *Census for 1910*, Vol. IV, “Occupations,” pp. 26 and 69.

The Report goes on to declare that this surprising increase in married women workers "is not confined to any one occupation or group of occupations nor to any one state or group of states." It is a widespread phenomenon, although most striking in the Southern States where many negro women are gainfully employed in agriculture.¹

The range of occupations of the 8,549,399 women gainfully employed in 1920² is various enough, from manufacturing and domestic service to clerical work and professional service. Of the total number of workers engaged in 1910 in manufacturing and mechanical industries, 17.1 per cent. were women; and of the total number of both sexes in professional service 44.1 per cent were women.³ It should be remembered, of course, that this high percentage is no doubt due to the very large proportion of women employed in teaching.

These figures clearly point to the fact that "the old order changeth giving place to new," and that the society of the twentieth century will be characterized by very large accessions of women, married and single, into the ranks of paid workers. Even now the figures of 1910 are misrepresentative of the number of women gainfully employed and the proportion in each type of employment. The war has given enormous impetus to the entrance of women into the field of gainful work, skilled and unskilled. This is so obvious as to be a commonplace. Of especial interest is the widening

¹ This Report is in mimeographed form and is issued by the Bureau of the Census upon request.

² According to preliminary figures released by the Census Bureau, November 30, 1921.

³ U. S. *Census* for 1910. Vol. XIV on "Occupations," pp. 48-9.

range of occupations which educated women are entering. College graduates have proved their worth, not alone as teachers, secretaries, and social workers, but as designers and draftsmen, as chemists and assayers, as business women and as skilled biologists in government laboratories. Having tasted the grateful fruit of economic independence it is idle to believe that all these women will give up their hard-won positions to return to the status of a dependent home-worker.

Despite the undoubted fact, then, that a high proportion of American women ultimately marry, it is also true that a huge army of women is gainfully employed in extra-domestic work and that this army is rapidly on the increase.¹ This fact must surely be taken into account in any fair-minded consideration of women's education. The fallacy into which so many persons fall in discussing the higher education of women, namely, that of regarding present social and economic conditions as permanent, has been vigorously attacked by Professor Thorndike:

"Nearly all opinions about the aim of education for girls beg the question in a perversely stupid way by supposing the one thing which almost surely will not be, namely, that the present modes of social, industrial, and domestic life will endure. The present training of young ladies would be an insanity if men selected their wives for fitness to be mothers or business partners, as in the future they very well may do. The present sanctity of the preparer of meals and darner of stockings will be as unintelligible as a negro's fetish if we all come to live barefoot in hotels!"

¹ Preliminary reports of the 1920 Census released for the press in November, 1921, show a gain of 473,627 women in gainful employments since 1910. This unexpectedly small increase is explained by the Director of the Census Bureau as due to a large decrease in the number of women in agriculture and in domestic service. All the other occupations show marked increases in the number of women employed.

"The wisest practical course for education, here as elsewhere, is to encourage rational experimentation, and give play for the survival of the fit. Speculative and *a priori* reasoning are nowhere so risky and wasteful as in facts of human social life."¹

The Economic Independence of Women and Home-Making.—Needless to say, the growing preference of women for economic independence creates some perplexing problems. Let it be stated at once that probably the greater number of women who marry will, for a long time to come, if not always, elect to be home-makers after marriage. The majority of married women, then, are not included in this social problem. Yet there will be a large enough minority among the younger generation of wives, who choose to carry on their business or profession outside the home, to make the question of maintaining a household a serious difficulty. It may be frankly admitted that this is preëminently a woman's problem and one with which women have not yet seriously attempted to grapple. In the case of the well-to-do the matter is comparatively easy of settlement, since it is still possible to secure well-trained domestic helpers, however limited the supply is becoming. But for the family of moderate income the problem is far-reaching and difficult. It is hard to see how the married woman, who desires to earn her own support in congenial work outside the home and who is unskilled in domestic tasks, can overcome the hindrances in her path while the present organization of household economy remains the same. Either she must neglect her home, hastily performing only the most essential tasks of food preparation and cleaning,

¹ "Sex in Education," in the *Bookman*, XXIII: 214.

or she must sacrifice her economic independence, give up her chosen work, and devote herself to a round of household tasks for which she may have a pronounced distaste. However insistent well-meaning men like President Hyde and Dr. Harvey may be that house-keeping is a vocation "for which women are by nature and taste eminently fitted," there is much evidence to show that large numbers of women have no liking and small ability for such work, even when they have acquired an intelligent understanding of food values, of textiles, and of sanitation. The deep-rooted tendency to view women in the mass and to describe confidently the essential qualities of that abstraction called "*Woman*" has already been commented upon. For generations to come men (and women as well) will continue to insist that women are peculiarly qualified by natural gifts and taste for the duties of home-keeping. The fact that in the past all women were of necessity domestic workers and some, at least, very successful and contented ones, has blinded many persons to the fact that a considerable proportion of housewives in every age have not been even tolerable home-keepers; and it is a safe inference that these women were either indifferent to housekeeping or found it thoroughly uncongenial work.

Shall Education in Home Economics be made Obligatory?—Where, then, lies the way out? Is it incumbent upon education in the interests of society to emphasize women's duties and responsibilities in the making and keeping of homes above every other social function? To this end shall schools and colleges bend their efforts in the direction which Dr. Harvey indicates and train *every girl and woman* in the principles of child care,

food preparation, making of clothing and household management—providing hours of laboratory work for practical application of the same? No doubt there are intelligent people who regard this as an ideal solution of the whole vexed problem. But what objections can be brought against it?

Of course the first and most obvious criticism of such an educational scheme lies in the social situation as outlined above. With a low marriage rate among college graduates and a sharply declining marriage rate in large industrial centers, it would seem pertinent to ask whether it is a sound social policy to compel every girl and woman to spend long hours in the study and practice of household economy when it is reasonably certain that thousands will never marry and have homes of their own. It may be objected here that a knowledge of foods, textiles, and child care would be valuable to girls even if they remain single. But why should this be true for women more than for men unless, indeed, a small fraction of them are caring for parents or for relatives' children? In such a case it seems reasonable to suppose that they might be trusted to avail themselves of the opportunities now rather generally furnished by high schools, evening classes, and certain colleges offering specialized training. Obviously a high school and college *requirement* in household economy would materially reduce the time for securing essential training which is at the disposal of young women who desire to be doctors, chemists, interior decorators, or employment managers. Education in domestic science, if made obligatory, would have the effect of training women for one vocation when society is demanding that they be effi-

cient in a hundred different callings. This thought was vigorously expressed a few years ago by a woman educator:

"But my objection to the whole movement to 'redirect' the education of girls is not that many very good things are not put into the redirected curriculum, but that its whole direction is wrong. I cannot say that it is not a good thing for *some* women to know how to cook and sew *well*, for it is indeed both good and necessary to civilized life. I cannot say that some of the subjects introduced into a good domestic science course are not educative and truly scientific, because I should be saying what is not true. But I do believe that the idea at the basis of it all is fundamentally false. For the idea is this: that one half of the human race should be 'educated' for one single occupation while the multitudinous other occupations of civilized life should all be loaded upon the other half. The absurd inequality of the division should alone be enough to condemn it."¹

But the social inequality that Miss Harkness condemns is not the only objection to such an educational policy. It would mean that thousands of women preparing to enter the professions and skilled vocations would be deprived of opportunity to acquire the thoroughness and breadth of theoretical knowledge as well as the technical efficiency that men in those pursuits would have had time to secure. Surely society is not the gainer by an educational arrangement which requires women to obtain a smattering of two vocations instead of a mastery of one. Nor does it appear that young women, eager to become proficient bacteriologists, teachers, or lawyers will be drawn toward domestic pursuits by being compelled to take courses in cooking and sewing when their interests and aims are focussed on quite different fields of work. It would

¹ Mary Leal Harkness, "The Education of the Girl," in the *Atlantic Monthly*, March, 1914.

not long escape the attention of these young women that social pressure was being brought to bear on them to divert their interest toward home-making; and that this pressure was operating to diminish their efficiency in their chosen vocations, especially when compared with that of young men. The reaction of this discovery upon their attitude toward the house-keeping arts might well be precisely the opposite of that which society sought to develop.

Is education, then, to encourage women to turn their backs upon marriage and the making of homes while they fit themselves with single-eyed devotion for a career? Such a policy seems neither wise nor inevitable. On the contrary, it is highly desirable that broad and thorough courses in household arts and in the care of children should be introduced into high schools and colleges as well as into the upper grades of elementary schools. Furthermore, in the higher schools, deans and advisers would do well to call attention to the value of these courses for all girls who are interested in the field of domestic economy or who expect to be home-makers. The dignity and worth of the present-day offerings in domestic art and science, together with their rich social background and their importance in promoting the well-being of society should be fully appreciated by every academic adviser of young women. In appealing fashion Professor Alexis Lange has described the kind of home economics courses he would wish to see introduced into colleges for women:

“Were I Fortunatus, I should gently twist my wishing-hat, and behold, there would be a group of new college courses, each centered about the fountain-head of all progress, the home. They would trace its evolution; they would reveal its significance in the advance of

mankind from beasthood to noble manhood and womanhood; they would disclose its unrealized ideals; they would deal with conditions that make or mar; they would consider the house beautiful and the house sanitary; they would apply the principles of efficient organization and management; they would wrestle with the problem of income and outgo; they would dwell on the relation of the home to the school, the church, the state, and the economic order. And a system of well-planned exercises would, whenever possible, connect insight with practice.”¹

Surely a college program so planned, in which the balance between the social and the scientific phases of household economy is so happily maintained, may be truly liberalizing—as much so as courses in history or higher mathematics. Indeed Professor Lange declares his belief that of several highways to liberal culture many women *and some men* would find this the most direct, since its goal would be that of all liberal courses—the development of personality. He goes further and grants that while such studies would find their richest fruition in wifehood and motherhood yet “their value as educative means would be independent of these phases of woman’s experience.”

But it is worthy of note that Professor Lange nowhere intimates that his ideal course on the home and the home-making arts should be made *obligatory* upon women. He clearly intends that it shall be only one of many royal roads to liberal education; for he goes on to urge the need in women’s colleges of well-organized professional courses in preparation for gainful occupations. His justification of such courses is brief but telling. In his opinion each young college woman should realize “that even the first degree, that

¹ “The Problem of the Professional Training for Women,” in *School and Society*, III: 480-85, April, 1916.

of liberal arts, should stand not only for fitness, but also for fitness for something."

Professional Education of Women and the Home.—But if young women are left free to turn their backs upon household arts and to elect both the type of education and of life career that appeal to them shall we not threaten the efficient management of our homes and alter their very character? In the opinion of the writer the former difficulty may be avoided by professionalizing the labors of the home and substituting coöperative for individual effort in the care of children, in food preparation and in house-cleaning. The movement to professionalize the work of house-keeping, although slow in gaining headway, has of late years given signs of some progress. In 1914 the Vienna Volksküchen, established through the efforts of Dr. von Kuhn at the close of the Austro-Prussian war, were feeding thousands of men and women of the laboring classes in every district of the city. At first it was planned that the food should be eaten at the kitchens; but by a subsequent arrangement it might be carried away by the patrons, so that families could enjoy their meals in the intimacy of the home. It is not difficult to imagine what a boon these peoples' kitchens must have been to over-worked mothers employed in shops and factories. No taint of the philanthropic "soup-kitchen" is said to have hung about these places, since they were managed on strictly business principles. Similar kitchens have been established in Germany and in the cities of Copenhagen and Christiania.

Likewise, in 1917, England established community kitchens in more than sixty centers, under the direction of local boards. A year later national kitchens were

established by the ministry of food to meet the popular need growing out of stringent food conditions. The writer of an open letter in the *Manchester Guardian* (1920) says of these kitchens:

“There may very likely be a permanent place in our social system for the national or municipal kitchen. It may revolutionize the methods of providing family dinners, and ultimately domestic cookery may have to be reckoned among the lost arts, but with a compensating gain to woman of freedom from toil and worry and monotony in the service of the home.”

The Woman’s Party in England has not been slow to see the value of communal kitchens to working women. In the platform of the party appears this plank to which its support is pledged:

“Food rations, accompanied by the development of communal kitchens, so as to economize domestic labor, reduce food waste, and guarantee to the people the best possible food at the lowest possible prices, cooked in the most skillful way, so that its full nutritive value may be secured.”

In America the history of public kitchens has been described as “an epitome of attempts at the development of agencies which undertook to relieve the housewife of some of the burdens of the individual kitchens.” The New England kitchen, under the management of Mrs. Mary Abel, was finally absorbed into the plant of the Women’s Industrial and Educational Union of Boston,—that organization which has so long been wrestling with the problems arising from women’s entrance into professional and industrial life. Communal kitchens have also been established here and there in the United States, notably in Carthage, Missouri, Evanston, Illinois, and Montclair, New Jersey. These ventures have been more or less short-lived,

although the two last named were probably the most successful of any of the pre-war experiments. In some instances the families ate at separate family tables in communal dining rooms; in other cases the food was sent to the homes in hot containers. An interesting experiment recently attempted in New York City was that of the American Cooked Food Service which furnished appetizing meals to families of the middle class. The food was sent to the homes in metal containers, packed in automobiles so that the families had only to serve the hot food and sit down to a home table and enjoy it. This service was avowedly designed for "the young family living on a small salary without maid service; the artist in studios; the large family in which the mother is verging on physical break-down through shortage in domestic help; and others ranging from the isolated occupant of the hall bed-room in a rooming house, to families living in private houses and the highest type of apartment houses." Unfortunately this promising experiment, after two or three apparently successful years, stranded on the rocks of finance! Up to the present time, then, the statement of a contemporary writer is probably true that American women have not made even a dent in their problem of combining congenial work with the responsibilities of marriage and motherhood. When the pressure of housework becomes intolerably heavy, owing to the rapid decrease in the number of domestic servants and the growing unpopularity of that form of work; and when young women in increasing numbers are confronted with the alternative of giving up a successful profession for household tasks, in performing which they are neither happy nor proficient, then it is

to be hoped that women themselves will attack this question with resolution and intelligence. In course of time they will work out an answer to the problem of maintaining the spiritual atmosphere of a true home while carrying on some chosen work outside its walls.

This discussion by no means seeks to imply that all young women will, in course of time, develop a marked distaste for domestic work and will eagerly turn to any other form of occupation that offers. Such it seems reasonably certain, will be far from the true situation. One has only to look about in the social life of to-day and observe the large number of educated girls and women who choose to develop their powers in and through the home to dismiss that bugbear forever. There will always be, I believe, a goodly proportion of women whose best work for society will be done as wives and mothers. But while we render those women their due share of credit for performing a social service of signal value, let us not, at the same time, frown disapprovingly on their sisters who seek to taste the joys of home life and motherhood while carrying on a gainful occupation.

But, the reader may ask, will not the character of the homes of the wives and mothers in paid employments be profoundly altered when cooking, house-cleaning, and even child-care are placed largely in the hands of experts? Unquestionably the effect of such a policy upon family life will be deep and pervasive. But that is not necessarily to say that the change would be for the worse. Unless we are willing to commit ourselves to the doctrine that a home is not a home unless three meals a day are cooked in its kitchen, we shall have to admit that a family could gather about

the table and enjoy a dinner together even if the food had been sent in from a communal kitchen. Conceivably the interchange of ideas and experiences around the family board might go on to more purpose if the wife and mother had been engaged in congenial work all day rather than in a monotonous round of marketing, cooking, and dish-washing against which she felt herself in silent revolt. So with the cleaning of the house. If the married woman is a wage-earner she can pay experienced cleaning women with modern apparatus to set her house in order.

The question of child care is more difficult. Probably the majority of married women working outside the home would wish to give a year to the personal care of a new-born child before returning to their vocation. The establishment of neighborhood nurseries and nursery schools in which little children could have the kindest and most expert care during the hours that their mothers were employed would seem to smooth the difficulty for many women. Such nurseries and pre-kindergarten schools have proved a boon to working mothers in London and why not here? In many instances little children receive far better nurture at the hands of professionally trained young women with a love of children than their uninformed mothers could give them, and wiser guidance in educative play as well. But the writer is fully aware of the objections that will be raised against such a social arrangement. What of the individuality of children thus turned over to experts? Can any woman, however highly trained and skillful, take the place of a mother in developing the individuality of a child? Probably not. But will not the mother have an hour or two daily,

lengthening to three or four as the child grows older, in which to establish those intimate, sympathetic relationships through which a good mother comes to understand the capacities for good and evil, the special gifts and deficiencies of that human being who is her child? Moreover, as the child grows to school and later, perhaps, to college age, will not the professional mother have a great and ever growing advantage over those mothers who are absorbed in domestic pursuits? Like their husbands, these women will have kept in touch with world currents outside the home and will have something to contribute to their mentally developing children which is the product of a rich and broadening experience.

But there is another side of the question that deserves brief consideration. It would be interesting to know how many mothers, ostensibly home makers, give to their young children a generous amount of personal care. Undeniably some mothers do. But is it not a matter of common knowledge that large numbers of home-staying women secure nurses for their babies who perform for them almost all the physical services that the mother is supposed to do? Probably, in the homes of the rich and the well-to-do, mothers have no more personal association with their babies than mothers in gainful occupations would have. Motor-parties, luncheons, and bridge, as well as serious club work, absorb the leisure time of many prosperous women with children. Why, then, does not society raise its voice against such apparent neglect of children? The answer seems to be because these women are *ostensibly* staying at home and playing the historic rôle of wives and mothers. On the other hand, in the case of women

of moderate means, most of the care of young children is performed by the mother. If she is not over-tired and over-strained such care may be ideal. But the writer has seen too many educated women of limited means who are trying to keep house and care for two or three little children, under conditions of fatigue and nervous strain, to feel that the results are always even moderately satisfactory for either mother or child. If the exacting physical care of babies and small children proves wearing to a mother with other domestic duties, it is a fair question whether those little ones would not be better cared for in a good nursery. The love of a mother for her children by no means precludes the possibility of tension and even friction between them, when the mother is nervously organized and not well fitted by taste or training for the constant duties which the physical nurture of small children involves. That same mother, given congenial work, might establish the closest spiritual relationships with her boys and girls in those hours of association in the family when the day's school and work were over.

The Question of Coeducation.—Even if the principle be accepted that every human being should be educated as a unique individual with a useful social work to perform, there still remains the question whether this education of personality cannot best be carried on, at least during adolescent years, when the sexes are separated. The policy of coeducation, believed by Europeans to have been settled once for all in this country, periodically becomes the subject of challenge and discussion. About 1870, when the states of the North and Northwest were extending improved opportunities for higher education to their youth, the demand was made that

women share equally with men in these privileges. This demand precipitated a controversy concerning the relative capacities and future "spheres" of the two sexes which was finally settled by opening all departments of the new state universities and agricultural colleges to women. A decade later the question was raised again, this time with respect to the public high schools rapidly springing up in the large cities throughout the country. Again the matter was settled by the establishment of coeducational high schools in every state of the Union except in a few of the larger cities of the East, notably Boston, New York (Manhattan only), and Baltimore. In 1891 the discussion broke out again, more particularly in the South, where public high schools of first grade were being rather tardily established and where young women were insistently demanding admission to the state universities. Once more the answer has been in favor of educating the sexes together. In view of the almost universal acceptance of the principle of coeducation in America whenever the issue has been raised it would seem that the question might now be decently interred not to be again resurrected. But such is not the case. About fifteen years ago the policy again became the subject of vigorous controversy and from that time to the present its advantages and disadvantages have been sporadically discussed. Since, then, the issue is still a live one in the public mind, it may be well briefly to consider the arguments pro and con.

Coeducation and Health.—A by no means negligible body of educators believes that, during the early years of adolescence, the health of girls suffers from being subjected to the strain of competition with boys in our public secondary schools. The hygienic aspects of the

problem of coeducation were ably discussed by Dr. Clarke about fifty years ago in his widely read book *Sex in Education*, previously referred to. In brief Dr. Clarke urged that, for physiological reasons, girls are permanently incapacitated for sustained intellectual work without injury to their health, which may reveal itself only in later years. About the same time a similar argument was advanced by the Englishman Dr. Maudsley in a much discussed article in the *Fortnightly Review*.¹ Dr. Maudsley warned the educators of his day that the girl who competes successfully with men in high school and college may get on for years without giving proper attention "to the periodical tides of her organization"; but in the long run Nature asserts its power and she is driven to seek medical advice. Nor is the vital energy thus drained in the competitive struggle easily regained.

Perhaps the mournful prognostications of these physicians made nearly fifty years ago, might be passed over without serious concern had not the question been raised again in more recent times. Some years ago an Austrian educator presented some striking figures showing the relative percentage of illness of the two sexes in the separate high schools of Denmark, Sweden and Norway and in the coeducational high schools of Finland. The statistics revealed a far larger percentage of girls than of boys who were "sickly," and troubled with "habitual headache," and chlorosis. In Sweden girls were found to be more sickly than boys in every year from 11 to 19 years of age. Also the mortality of girls from 12 to 16 years was higher than that of boys. From these facts the writer concluded

¹ "Sex in Mind and In Education," *Fort. Rev.*, April, 1874.

that the development of puberty in girls represents a process in which hygiene is of higher importance than in the case of boys, and the observance of hygienic rules plays the leading part in the establishment of health. Yet, as Burgerstein points out, the burden of study in public secondary schools in Europe grows continually heavier. Since the elective system is but meagrely developed in these schools and Latin and Greek are compulsory studies in most of them, girls should not be loaded with such a burden as the boys have now to bear. They should therefore be educated in separate schools; or, if coeducational high schools are established in Europe, the curriculum should be made lighter for girls so that they might have more time to spend in out-of-door exercise.¹

Another criticism from the aspect of health is brought forward by Dr. Julius Sachs, well-known in America as an educator in the secondary school field. Dr. Sachs charges that coeducation in the public high schools of the United States "has unconsciously developed in the course of time an adaptation to the physical capacities of our girls." Women teachers unquestionably adapt the class work to the strength of the girls; "and this attenuated demand has become so general that our entire secondary school system, even where male teachers are largely employed, lacks that stimulus of highest attainment which is wholesome to every young man. . . ." As a result girls tend to impair their strength when boys have not utilized their full capacities. In Dr. Sachs's opinion the situation is so unsatisfactory that he looks for-

¹ Leo Burgerstein, "Coeducation and Hygiene," *Ped. Sem.*, XVII: 1-15, March, 1910.

ward to the time when growing prosperity may bring about a radical change in the attitude of the American people toward coeducation.

Needless to say these criticisms may not be lightly dismissed. If the health of girls is seriously threatened by the demands of our coeducational high schools; or if the program of these schools is so devitalized, in an attempt to adapt it to the physical weakness of girls, that boys are not stimulated to their best endeavors then the coeducational high school must go. But are these strictures well-founded so far as American conditions are concerned? Unfortunately, as far as the writer knows, no careful studies of the relative health of boys and girls in our high schools have been made at all comparable with those of Burgerstein for selected European countries. In the absence of such statistics one must proceed cautiously in drawing the conclusion that girls do not suffer in health from the work demanded of them in secondary schools. But does not the steady growth in numbers and popularity of the athletic girl in high school and college furnish solid ground for hope that the "feeble" and "delicate" type of American woman, so frequently commented on by visiting foreigners a generation or more ago, is being gradually eliminated? There exists some evidence that the American girl of to-day is a more vigorous and healthy type than her grandmother or her mother. Dr. Jesse Williams, Associate Professor of Physical Education in Teachers College, Columbia University, declares that he has observed a marked improvement in the health of girls attending his summer camp during the last ten years—an improvement which he attributes to their more active participation in out-of-door sports.

More specific evidence to the same effect is furnished by Miss Mabel Newcomer in a recent statistical study of the *Physical Development of Vassar College Students 1880-1921*.¹

Miss Newcomer used in her study data obtained from the records of the department of physical training, covering the period from 1884 to 1920. She selected the records made by the entering class of freshmen during their first physical examination in the fall. The figures show a steady gain in mean height, weight, and girth of waist during every five-year period. Also there was a continuous improvement in lung capacity after 1899, when the spirometer had been perfected sufficiently to give reliable records. As the investigation failed to disclose the causes of this marked physical improvement, Miss Newcomer inferred that it might be due to the fact that a larger proportion of western girls of pioneer stock had been admitted to Vassar in recent years than was the case in its earlier history. But an examination of the records failed to show any appreciable increase in the number of students from western states. She next formed the hypothesis that the physical gain might be caused by the more active participation of girls in sports during the last decade. Fortunately, records had been kept over a period from 1896 to 1920 of the average number of sports engaged in by students *prior* to entering Vassar. The record by five-year groups is as follows:

| YEAR | NUMBER OF STUDENTS | MEAN NUMBER OF SPORTS |
|-----------------|--------------------|-----------------------|
| 1896-1900 | 992 | 2.0 |
| 1901-1905 | 1167 | 3.1 |
| 1906-1910 | 1272 | 3.9 |
| 1911-1915 | 1482 | 6.3 |
| 1915-1920 | 1236 | 9.2 |

¹ *Amer. Assoc. Stat., XVII* : 970-982. June, 1921.

The widespread interest of girls in out-of-door sports and games during the last ten years seems largely responsible for their steady gain in height, weight, girth of waist, and lung capacity—all indices to some extent of health and vigor. Needless to say, similar studies both of high school girls and college women, would be of the greatest service in showing that, under proper conditions of out-door exercise and recreation, and with observance of sensible, hygienic rules, normally healthy girls can carry the work demanded in public high schools with an actual physical gain.

But even if the attendance records of secondary schools showed (as they well might) that the percentage of absences among girls is higher than among boys, would that be an argument against co-education? It might be if the theory could be proven, as Dr. Sachs believes it is, that the more numerous absences of the girls hold back the boys from advancing in the various subjects as rapidly as they are capable of doing. Long ago Dr. W. T. Harris, when Superintendent of Public Schools in St. Louis, investigated this phase of the problem of coeducation. He found that the average attendance of *boys* in high schools in the country at large was less than 75 per cent. although it rose to 90 per cent. in some city schools. Furthermore, although the percentage of absence of girls in the St. Louis high schools was somewhat larger than that of boys, Dr. Harris does not hesitate to say that “the statistics of the attendance of girls—compared with that of their percentage in scholarship, does not allow us to conclude that the progress of the classes suffers on their account—it is safe to say that no practical difficulty is experienced

in the high schools on account of the larger per cent. of absence of the girls.''¹

Of course Dr. Harris's testimony of itself does not dispose of the claim that coeducation in high schools results in a lowering of standards and requirements to the physical level of girls and thus fails to stimulate boys to their best efforts. Yet it seems reasonably certain that if such were the state of affairs educators in considerable numbers would long ago have discovered it and led a crusade against these conditions. Moreover, there appears to be little or no evidence that the work of boys, segregated in separate high schools (as in some eastern cities) is superior to that of boys in coeducational schools. A thorough-going investigation of this question would be of great value in solving the many-sided problem of coeducation.

Argument from the Standpoint of Mental Differences.—As we have seen, Dr. Maudsley's article on *Sex in Mind and in Education*, written in 1874, raised a furore of controversy with respect to the policy of coeducation. Holding that the brain is in closest physiological sympathy with other organs of the body, Dr. Maudsley was led to proclaim that the reproductive organs exercise a profound influence upon feelings and ideas, desires and will, causing these mental states to be sharply different in the two sexes. Therefore he declared that "to aim by means of education and pursuits in life to assimilate the female to the male mind might well be pronounced as unwise and fruitless a labor as it would be to strive to assimilate the female to the male body by means of the same kind of

¹ *Report of Public Schools, St. Louis, Mo., 1872-73*, pp. 105-120. Reprinted in *Report of United States Commissioner of Education, 1891-92*, pp. 808-812.

physical training and by the adoption of the same pursuits."

For many years this article furnished an armory of weapons freely drawn upon by opponents of "mixed education." That its influence is still not wholly negligible is evidenced by the reprinting of the article in 1918 in the *Educational Review*. But, in view of the intellectual achievements of women in high schools and colleges, there are few educators to-day who can be induced to align themselves under the banner of this doctrine. Experience and ample statistics alike disprove it, as has been shown in the preceding chapter. However, this does not prevent the opponents of co-education from declaring that, owing to temperamental differences, girls feel the strain of high school work far more than boys and should therefore not be urged forward in their studies but rather held back. This group points to the greater conscientiousness of girls, and to their extreme sensitiveness to approval and disapproval, as evidence that they should be educated in separate schools, where the driving methods, appropriate to boys, will be wholly eliminated. The question concerning the greater affectability and conscientiousness of girls, when compared with boys, is still a moot point. That women *do* appear to have these temperamental traits in larger measure than their brothers cannot be gainsaid. But how far they are due to inherent differences in the sexes and how far to ages of social suggestion and pressure upon women to walk the strait path of duty remains undetermined. It might not be too daring a hypothesis to suggest that when studious girls are relieved from the extra burden of home tasks, so often required of them, and encour-

aged to spend this time in healthful sports, as boys have always done, these supposed temperamental differences will vanish into thin air. Certainly the athletic type of girl in our midst to-day shows no more undue concern over her studies than her brother!

There still remains for brief consideration the criticism that coeducation does not allow for differences in physiologic age and mental development. Girls mature earlier than boys, both physiologically and mentally; and the charge is made that boys never catch up with girls during the high school period. Dean Russell declares that the inferiority of boys is noticeable in any high school class, with the result that they tend to become accustomed to "second best" achievement. In Dean Russell's opinion this condition is the "strongest argument for separation of the sexes."

In meeting this objection it is necessary to examine the evidence to ascertain whether the earlier mental maturity of girls actually does result in marked inferiority on the part of boys in high school work. The studies of high school grades made independently by Thorndike and Miss Rusk do not tend to support this theory.¹ Thorndike's estimate of the percentage of boys who equalled or exceeded the median of the girls in English, mathematics, Latin, and history, showed that the boys excelled in every subject except English. Miss Rusk's study revealed that the boys' percentage exceeded the median of the girls in geometry, chemistry, and physics and almost equalled it (49 per cent.) in history. In English, Algebra, Latin, and German, the girls showed a superiority. Such "inferiority" as boys reveal in high school studies commonly lies in the field

¹ Thorndike, *Educational Psychology*, III, 182-84.

of the humanities and is offset by their superiority to girls in the sciences. It is highly probable that the differences in both cases are due to social circumstances rather than original nature, although this remains to be fully proved.

Coeducation and Vocations.—But the attacks leveled against the policy of educating the sexes together are not limited to the physiological and psychological aspects of the problem. An influential group criticises coeducation mainly on the ground that high schools and colleges do not adapt their curricula to the future needs of women but “toss them into the educational hopper with the men.” In consequence girls discover at graduation “a rigid wall of professional opportunity in which every gateway bears the sign ‘No thoroughfare except for men.’” Of course this criticism means that many sincere and intelligent people still believe that woman’s sphere and woman’s interests have not materially changed since the eighteenth century nor are they destined to undergo further transformations. It follows that these men and women urge the necessity of “an education that will prepare [women] for employments in which by nature and the customs of civilized society they are destined to be engaged.”¹

As this argument has been met in a previous section of this chapter, it needs only to point out once more the fluid character of our age, the tremendous changes that are taking place in every aspect of woman’s life, and the very wide variety of gainful employments they are pursuing both before and after marriage. But even if this were not so, the criticism would hardly consti-

¹ Abernethy, “Anomaly of Coeducation,” *Sch. and Soc.*, IX: 260. June, 1919.

tute a valid objection to coeducation, since the necessary differentiations in the curriculum for girls would not necessitate their being educated in separate schools —a demonstrably expensive method. They could still meet with boys in history, language, and mathematics classes, even if their science were specialized with reference to the fields of home economics, household sanitation, and child hygiene.

Social and Moral Aspects of Coeducation.—Among the most serious charges brought against coeducation in high schools are those based upon its undesirable social and moral consequences. Many thoughtful people believe that the education of boys and girls together during early adolescence tends to make girls rough and rude in manners, while the boys (having the stronger personality) do not become gentler and more considerate because of their daily association with girls. In this connection it is interesting to note that Dr. G. Stanley Hall brings precisely the contrary criticism, namely, that boys are made too effeminate when educated with girls; whereas "in order to be well virified later," boys probably ought to be permitted to be so boisterous and rough as not to be fit companions for girls. Girls should be allowed "to have their sentimental periods of instability," while boys "need a different discipline and moral regimen and atmosphere."

Deplorable as this is, worse is yet to come. For we are assured that there "is a little charm and bloom rubbed off the ideal of girlhood by close contact, and boyhood seems less ideal to girls at close range. In place of the mystic attraction of the other sex that has inspired so much that is best in the world, fa-

miliar camaraderie brings a little disenchantment. This disillusionizing weakens the motivation to marriage sometimes on both sides, when girls grow careless in their dress and too negligent in their manners . . . and when boys lose all restraints which the presence of girls usually enforces, there is subtle deterioration.”¹

This is truly a discouraging picture! but perhaps a few discriminating souls may take heart from the fact that its details somehow fail to reproduce their own experience and observation with respect to the association of high school boys and girls. Moreover, the frank camaraderie of high school youth of both sexes appears to some of us as so precious and desirable a thing to bring about that we are willing to run the risk of some “disillusionizing” and the loss of part of the “mystic attraction” of one sex for the other.

A more serious criticism is brought by Dr. Hall and others against coeducation in high schools on the ground that boys and girls in their teens are best removed from a situation which provokes “half conscious cerebrations about wedlock.” This deserves thoughtful consideration. Unquestionably at this period of their lives, when rapid physiological changes are taking place, sex attraction may be so strong as to interfere with serious intellectual work. The remark is attributed to Edward Howard Griggs that “adolescence is the time when girls are all legs, no feathers and always to be found in the front yard.”² A respectable body of evidence has been furnished the writer by high school teachers of experience which goes to

¹ *Adolescence*, II: 620-21.

² Since the front yard is obviously the best vantage ground from which to view the comings and goings of boys, the remark will not be challenged by those acquainted with the adolescent girl and her ways.

show that in every high school class there are some boys and girls so stimulated by the presence of the other sex that they fail to do their best work. John's mind is too often occupied with the impression he is making on Jane or with their next social "date" and the same is true of Jane. One teacher of long experience recently expressed the view that she would educate boys and girls together during the first two years of high school and segregate them during the last two years when sex consciousness is much more acute. Out of this heightened sex attraction she had seen grow romances "that no sane person would try to check" and also "a silliness that, if it does no more, vastly interferes with work." No doubt many educators could match the cases this teacher cited of a boy of seventeen "completely razzle-dazzled through his last year by a golden-haired vamp who had no idea of marrying him"; and of girls removed from high school by anxious parents because their "heads are just full of boys" and the parents won't have them "spoiled." But it is pertinent to ask whether the danger is removed by segregating the young people in separate schools. Will they not make use of every opportunity, innocent or otherwise, of seeing each other out of school? These are the highly sexed boys and girls whose heads will be full of the other sex in any case. Moreover, they usually constitute a small, though troublesome, minority in any school, as even the opponents of coeducation admit. Should they be permitted to overthrow a system which has worked with signal advantages to the majority of students over a period of more than fifty years? Rather it would seem that every effort should be made by school and

home in coöperation to develop in these boys and girls habits of self-control and standards of wholesome companionship when they are thrown together. Segregation will only add to the mystery and allurement of each sex for the other and will encourage those "gossiping groups" so frequently commented upon by teachers in separate schools.

On the affirmative side the strongest argument for coeducation is probably the fact that if our boys and girls do not come to know each other in school days they will all their lives be hampered by ignorance of one another's differences of temperament, capacity and fundamental interest. Both will suffer and, as one writer puts it, will "find it difficult to run in the harness of married life." Wholesome comradeship and sane competition in intellectual pursuits, in the course of which each sex learns to respect the abilities of the other, would seem to be a sure foundation on which to build the romance of later years.

One further aspect of the problem of coeducation remains to be considered, and that is the effect upon sex morals. "Silliness" and romantic dreaming are undesirable enough; but unfortunately boys and girls of high school age do not always stop there. Some evidence there is to show that positive immorality has been discovered among high school students too late to prevent a train of tragic consequences. In the words of an experienced teacher: "I could tell some sad tales of waves of impurity that crept in a subtle stream through a school, and of the occasional tragedy from which no school is ever quite secure." And another teacher refers to several cases of immoral intercourse which had occurred in the same school

within a year or two, one of which resulted in the suicide of the girl.

But it may fairly be questioned whether coeducation is responsible for these tragedies and whether they do not occur in places where the sexes are educated in rigidly separated schools. It is highly improbable that sexual immorality is less prevalent among the boys and girls of France and England, who are educated separately, than it is in America or in those cities of our country where coeducation in high schools does not exist. Is it reasonable to believe that the boys and girls in the high schools in New York City, where the sexes are segregated, are more "moral" than in Brooklyn or Philadelphia where they are educated together?

But there is another aspect of this question which cannot be ignored. A mass of testimony is furnished by English teachers, now teaching in coeducational schools, who had once taught in the separate boys' schools of England, to the effect that the moral tone of the "mixed school" is far more wholesome. One English educator does not hesitate to say that "the monastic system in schools is the stronghold of immorality." He refers, of course, to those secret vices which are known to flourish among boys and men when they are segregated for long periods of time from the society of women. "Whenever it has fallen to my lot," he writes, "to meet in conversation any of the headmasters of our Public Schools, I have endeavoured always to ask this question: Do you consider that it is possible to root out from a large school the vice of immorality? The sadness of the answers has varied only in degree. Whilst some have seemed to regard

this inevitable presence almost with resignation, others have shown that it is to them a veritable horror, casting its dark shadow over all their experience.”¹

The experience of Mr. Grant receives support from the oft-quoted statement of Jean Paul Richter: “To insure modesty I would advise the education of the sexes together; for two boys will preserve twelve girls, or two girls twelve boys, innocent amidst winks, jokes, and improprieties, merely by that instinctive sense which is the forerunner of natural modesty. But I will guarantee nothing in a school where girls are alone together, and still less where boys are.” Be it noted that Richter regards the moral benefits accruing from coeducation as mutually affecting boys and girls. And such, indeed, appears to be the case. A flood of light has recently been thrown upon the sex life of girls which tends to show that, although vicious sex practices may be less prevalent in girls’ schools than in boys’, nevertheless unwholesome gossip about sex is very common. Furthermore, the tendency of girls to develop “crushes” seems to be far more marked in separate girls’ schools than in coeducational institutions. And the potentialities for evil of these sentimental affairs between girls are too well known to need more than passing comment.

Summary.—With due allowance for the disadvantages alleged to follow upon coeducation, it would seem that, from every point of view, its benefits far outweigh its defects. The evil effects upon the health of girls, as confidently prophesied more than a generation ago, have not appeared. Their capacity to keep abreast of

¹ Cecil Grant, “Idleness and Coeducation,” in Alice Woods (editor) *Coeducation*, p. 27. London, 1903.

the intellectual work demanded of them has been abundantly demonstrated. Although the pressure of studies upon over-conscious girls and those expected to do household tasks in their free time is over-heavy, the way out appears to lie in the active encouragement of athletics for girls and the deliberate attempt to draw every girl into out-door sports. The establishment of a variety of courses in coeducational high schools to meet the varied vocational needs of boys and girls enables the latter to fit themselves in some measure for the vocation of housewife and mother on the one hand or for gainful employment on the other. Finally, the social and moral advantages of educating the sexes together appear to the writer to be far more real than the concomitant disadvantages. Whereas a few boys and girls may be over-stimulated in each other's society, this seems rather a challenge to a more intelligent understanding and direction of these types than an argument for the abolition of coeducation. If men and women are to live and work, play and aspire together, they must grow into mutual understanding and respect. And this can best come about through a common education which reveals to each the strength and weakness, the aptitudes and limitations of the other.

SELECTED READINGS

1. Sex Differentiation in Education

CHRISTMAN, O., "Education for the Home," *Arena*, XXX: 401-9, October, 1903.

DEVINE, EDW. T., "The Economic Place of Woman." *Jour. of Assoc. of Coll. Alum.*, pp. 13-23, January, 1905.

GORDON, KATE, "Wherein should the Education of Women differ from that of Men." *Sch. Rev.*, XIII: 789-94, December, 1905.

HALL, G. STANLEY, "Adolescence," Vol. II: 624-47.

HARVEY, L. D., "The Education of Girls." *Proc. of the N.E.A.*, July, 1912, pp. 425-30.

HOWARD, GEO. ELLIOTT, "The Education of Women and Sex Equality." *Proc. of Amer. Acad. of Polit. and Soc. Sci.*, LVI: 38-46. November, 1914.

HOWES, ALICE PUFFER, "Accepting the Universe." *Atlantic Monthly*, April, 1922.

HYDE, WM. D., "The College Man and the College Woman." Ch. X. Boston, 1906.

MÜNSTERBERG, HUGO, "American Traits," pp. 133-72. 1902.

PARRISH, C. S., "Should the Higher Education of Women differ from that of Men?" *Educ. Rev.*, XXII: 390-96.

POOPENOE and JOHNSON, "Applied Eugenics," pp. 378-84. New York, 1918.

SYKES, FREDERICK H., "The Social Basis of the New Education for Women," *Teachers College Record*, XVIII, No. 3, 226-242. May, 1917.

WEBBRIDGE, ELEANOR R., "The Professional Education of Women and the Family," *Social Hygiene*, VI: 181-196.

2. Coeducation

ABERNETHY, J. W., "Anomaly of Coeducation," *Sch. and Soc.*, IX: 259-62, June 1919.

BURGERSTEIN, LEO, "Coeducation and Hygiene," *Ped. Sem.* XVII: 1-15, March 1910.

GALE, ZONA, "What of Coeducation?" *Atlantic Monthly*, CIV: 95-106, July 1914.

GRANT, CECIL, AND HODGSON, NORMAN, "The Case for Coeducation." London, 1914.

JORDAN, DAVID STARR, "The Question of Coeducation." New York, 1906.

LARRISON, ELEANOR R., "Association of Boys and Girls in the Teens," *Educ.*, XXXIX: 142-8, November, 1918.

MAUDSLEY, DR. HENRY, "Sex in Mind and in Education." *Ed. Rev.*, LV: 427-39, May, 1918.

OLIN, H. R., "Women of a State University; an Illustration of the Working of Coeducation in the Middle West." New York, 1909.

PRINGLE, RALPH W., "Adolescence and High School Problems." New York, 1922.

Report of the United States Commissioner of Education, 1891-2.
“Coeducation of the Sexes in the United States,” II: 783-859.

RUSSELL, JAMES EARL, “Coeducation in high schools; is it a failure?” New York, 1913.

SACHS, JULIUS, “Coeducation in the United States,” *Ed. Rev.*, XXXIII: 298-305, March 1907.

WOODS, ALICE (ed.), “Coeducation, a series of essays by various authors with an introduction by M. E. Sadler.” London, 1903.

CHAPTER V

CULTURAL VS. VOCATIONAL EDUCATION

The Historic Divorce of Liberal and Practical Education.—The student of educational history cannot fail to be struck by the power of the written word, the tremendous sway of the symbol in education. As soon as a people had developed a written language so soon did its education tend to withdraw itself from contemporary experience in order to impart to the young the social interpretations of past generations as contained in manuscripts and books. This is of course not to decry the importance of symbols as an indispensable factor in education but only to point out that, because of the supreme value attached to the written word, to the neglect of contemporary experience, education tended to become bookish and increasingly remote from every-day life. In the course of centuries, as vast bodies of knowledge developed and were organized, traditions grew up concerning the relative values of these knowledges. The utmost importance came to be attached to those interpretations of life, in its many-sided aspects, given to the world by the youthful and vigorous nations of Greece and Rome. Much later, science fought its way to recognition and attained a secondary place in the curriculum of schools and universities. It remained true, however, among all civilized peoples that education preëminently was

concerned with mastery of the printed page, or to use Matthew Arnold's phrase, "with the best that has been thought and said in the world." In the sixteenth century culture became so identified with symbols almost to the exclusion of vital experience that Erasmus was moved to write: "All knowledge falls into one of two divisions: the knowledge of 'truths' and the knowledge of 'words': and if the former is first in importance the latter is acquired first in order of time. . . . *For ideas are only intelligible to us by means of the words which describe them; wherefore defective knowledge of language reacts upon our apprehension of the truths expressed.*"¹

Side by side with respect for letters developed the conception of knowledge as an end in itself. This ideal of knowledge for knowledge's sake was dominant more than two thousand years ago among the Greeks, was passed on to the Romans and then to the peoples of Western Europe during the Renaissance. Most clearly of all his countrymen Aristotle voiced the feeling of educated Greeks that study and research for its own sake, the life of reason as an end in itself, is the highest good of man. A liberal education, in Aristotle's view, is liberal in proportion to its divorce from practical affairs; and conversely an illiberal education is one primarily concerned with training for useful occupations. As Professor Dewey has so illuminatingly pointed out, the wide gulf existing in Greece between liberal and menial education, between the cultural and the practical arts, was the natural outcome of the existing chasm between the laboring class

¹ "De Ratione Studii," in Woodward, *Erasmus concerning Education*, p. 162. Italic mine.

(largely made up of slaves) and the leisured class. To quote Professor Dewey: "The conception that liberal education, adapted to men in the latter class, is intrinsically higher than the servile training given to the former class reflected the fact that one class was free and the other servile in its social status. The latter class not only labored for its own subsistence, but also for the means which enabled the superior class to live without personally engaging in occupations taking almost all the time and not of a nature to engage or reward intelligence."¹

So passionately did Aristotle hold to the ideal of rational activity as an *end*, bearing within itself its own satisfying rewards, that he even distinguished between the exercise of reason in practical and political affairs and the life of reason for its own sake. Again Professor Dewey makes the contrast sharp and clear: "For there is a distinction in ends and in free action, according as one's life is merely accompanied by reason or as it makes reason its own medium. That is to say, the free citizen who devotes himself to the public life of his community . . . lives a life accompanied by reason. But the thinker, the man who devotes himself to scientific inquiry and philosophic speculation, works, so to speak, *in* reason, not simply *by* it."²

The origin of the historical antithesis between liberal and practical education, as springing from the division between the laboring and the leisured class, is again made plain in the social history of the Roman people. The high regard of the citizens of the early Republic for the man who tilled his own lands and engaged in

¹ *Democracy and Education*, p. 294.

² *Ibid.*, p. 297.

other forms of manual work disappeared only when Rome's wars for conquest filled her cities and villas with an enslaved class and created the old distinction between the servile toiler and the educated man of leisure. In modern society the gulf between the classes has been somewhat lessened by the growth of a moral sentiment against slavery that has led to its abolition among civilized nations. But who would be blind enough to maintain that the same clear-cut division between the toilers in mine and factory, meagerly educated in the common schools, and the propertied class who enjoy the benefits of leisure and a liberal education does not still persist in our present day industrial society? In consequence, the inevitable opposition between cultural and vocational studies has made itself felt throughout the educational system of America, more especially in its higher stages.

It is a hopeful index of the genuine character of our democracy that this distinction in educational values has not escaped adverse criticism. This criticism, pungently expressed, has evoked passionate rejoinders from those educators who desire to maintain the existing type of liberal education unchanged. On this issue American educationists are divided into warring camps, and, interestingly enough, the battle rages with especial bitterness in the field of the women's colleges. For a generation or more the universities for men have been enriching their curricula with vocational courses other than the so-called "learned professions" of law, medicine, and theology; witness the development of schools of agriculture, pharmacy, engineering, architecture, journalism, commerce, and business. But the eastern colleges for women, established with the en-

thusiastic purpose of demonstrating to a skeptical world "that John and Jane are precisely alike, especially Jane!"—these institutions, alarmed by the vigor and cogency of the attack upon their educational strongholds, have organized a powerful if not an aggressive defense.

The Argument for the Historic Ideal of Culture.—The case for the defenders of the old ideal of liberal education cannot be lightly dismissed without an honest hearing. Its basic position is, of course, that where a subject is pursued with a view to applying the knowledge or skill it may afford to the work of earning a living, the subject fails to yield its richest intellectual and æsthetic returns. Learning as preparation for a life career is self-interested learning; it is narrow in range and application; it does not liberalize the mind of the learner. His chief concern is to acquire only such knowledge as his vocation demands and to devote his intellectual and manual energies to the mastery of a specific technique. Such an education, declares this group, may produce skill in *doing* something but it lamentably fails to develop a person capable of *being* something. The all-round development of personality, revealed in the broadly enlightened and informed mind, the trained intellectual powers, the developed taste and appreciation of the liberally educated individual is sacrificed by the vocational group to the cramped, bread-and-butter aim of earning a livelihood. The self-interested character of the latter, inherent in its very nature, renders it a dangerous foe of liberal culture, the distinguishing mark of which is the disinterested search for truth and beauty.

The elements of truth in this position are obvious

enough and entitle it to serious consideration. Despite this fact, the opponents of the historic ideal of culture have pushed its advocates so shrewdly that they have become fearful of the inroads of the enemy into their ranks. The distress signals flung out in recent writings bear witness to this alarm. Thus ex-President Taylor of Vassar appeals to the alumnæ of the college in fervent language:

“Watch your heritage, college women! Watch the tendencies to reduce your colleges of liberal learning by a theory which would logically make our colleges for men into schools of business, professions, training for fatherhood, education in blacksmithing, or for bank clerks. Better housekeepers, wives, mothers, teachers, social workers, stenographers, saleswomen,—yes! yes! Our need is manifest. But better women, first of all, larger in grasp, wider of vision, fuller of resource for the soul in the conflicts of these latter days—that was the message, practically new that Vassar flashed on a questioning world.”¹

Even more agitated is the appeal of ex-President Thomas of Bryn Mawr:

“A woman’s college is a place where we take those wonderful, tender, and innocent freshmen [sic!] with their inherited prejudices and ancestral emotions and mould them by four years of strenuous, intellectual discipline into glorious thinking, reasoning women fit to govern themselves and others.

“But the curriculum of our women’s colleges is threatened by a terrible foe at the gates—a wolf in sheep’s clothing that can only be kept at bay by the most gallant kind of warfare. . . . So-called new fashioned, or modern, subjects are to be substituted for the old tried disciplines. *Japanese geisha schools are springing up on all sides.* *Practical vocational courses are to be given.* Latin and Greek are to go. Algebra and geometry are also to be dropped—only so much commercial arithmetic as we use in daily life (which

¹ See Address by ex-President Taylor, “Vassar’s Contribution to Educational Theory and Practice,” in *The Fiftieth Anniversary of the Opening of Vassar College*, 1915, p. 31.

is practically none) is to be taught. History (except the very most modern kind) and all literature (except twentieth century literature) are to be scrapped.

"Now is the time for us to fight for our lives, for our educational convictions and save if we can *at least the girls of the east* by firmly refusing to give up our present college curriculum. It is our highest duty as educated women to . . . pass on unimpaired to the girls of the next generation this precious intellectual heritage which has been so hardly won."¹

An analysis of the arguments in behalf of culture as the end of education serves to make plain that the strength of its advocates lies more in their exposure of the weak points of their opponents' position than in the demonstration of the positive merits of their own. Certain it is that Aristotle, the first apologist for this view, was profoundly right when he declared that "any occupation, art, or science, which makes the body or soul or mind of the freeman less fit for the practice or exercise of virtue, is vulgar; . . ."²

By "virtue," of course, Aristotle meant that intellectual and moral excellence which the Greeks always associated with the word *ἀρετὴ*. It cannot be doubted that much of the unintelligent, menial work performed by the laboring classes in Greece fell under the ban pronounced upon it by Aristotle. It *did* tend to make "the soul or mind of the freeman less fit" for the pursuit of those intellectual, moral, and political activities which constituted for Aristotle, as for most cultivated minds, the essence of "the good life," the life of excellence. But when Aristotle goes further and stigmatizes "all paid employments" as vulgarizing he brings into clear light the crux of the whole matter.

¹ "The Curriculum of the Woman's College" in the *Jour. of the Assoc. of Coll. Alum.*, p. 590. May, 1917.

² *Politics*, Book VIII.

If it be true that all wage earning occupations tend to "absorb and degrade the mind" of the worker and, by inference, that all training for such vocations has a similar vulgarizing effect, the case for the adherents of a liberal education, in the historic sense, seems made and the advocates of vocational training have lost the day. No educator in his senses can favor any type of mental training which restricts the range of the students' interests and knowledge, trains only a selected few of his mental powers, neglects the development of those tastes and appreciations that make possible "the worthy use of leisure," and absorbs the mind of the student in the technicalities of earning a livelihood.

But is this position sound? Is it true that the professional training of the clergyman, the doctor, the journalist, the teacher, or the architect is of such a nature as to degrade his mind to the mere interests of money-making? Is it not rather true that Aristotle and the modern protagonists of culture tend to make inherent in all wage-earning occupations a defect that characterized only those demanding manual skill without thought? Even the most enthusiastic adherents of cultural education would hardly deny the liberalizing elements in the course of training for the so-called "learned professions." Yet, even while admitting the possibility that professional and cultural training may not be wholly alien to each other, the advocates of liberal education take the ground that the very choice of a life-work and the selection of those studies which will best further that purpose at once introduce the limiting evils of specialization and absorption in material interests. So far as the latter charge is con-

cerned it cannot be more satisfactorily met than by quoting the argument of Professor Dewey who has thought more deeply into the heart of this question than any other educator of his day:

"Even if we insist that the interests connected with getting a living are only material and hence intrinsically lower than those connected with enjoyment of time released from labor, and even if it were admitted that there is something engrossing and insubordinate in material interests which leads them to strive to usurp the place belonging to the higher ideal interests, this would not—barring the fact of socially divided classes—lead to neglect of the kind of education which trains men for useful pursuits. It would rather lead to scrupulous care for them, so that men were trained to be efficient in them and yet to keep them in their place. . . . Only when a division of these interests coincides with a division of an inferior and a superior social class will preparation for useful work be looked down upon with contempt as an unworthy thing: *a fact which prepares one for the conclusion that the rigid identification of work with material interests and leisure with ideal interests is itself a social product.*"¹

But what of the further charge of narrow specialization as inseparable from training for useful work? It must be freely granted that specialized training may be so narrowly conceived and carried on that it fails to result in culture, in a liberalized mind. No one who has observed with an open spirit the courses in some, at least, of our specialized schools such as engineering, applied science, education, or domestic economy, can fail to be impressed with the fact that their field of study is too restricted and far too unrelated to the larger social background of community life. This is a real danger that confronts all specialized training and it should be frankly faced and acknowl-

¹ *Democracy and Education*, p. 294. Italicics mine.

edged. But it is one thing to recognize the pitfalls into which preparation for life work may fall and it is quite another to maintain that these dangers are *inherent* in that type of education. The fact that vocational training in the past has had too limited an outlook upon contemporary life, and has drawn in too niggardly a fashion upon the great reservoirs of knowledge and inspiration that form the social inheritance of mankind should not in itself lead educated men and women to hold vocational training in low esteem. Rather the situation should serve as a challenge to work out programs of education for a wide variety of skilled vocations which should be enriched by tributary streams from the whole field of knowledge. After thirty years of experience as an educator, Dr. Felix Adler declares with conviction that it is a fundamental mistake to set culture over against preparation for life. Rather is it true that it is preparation for life which is to give us culture.

"We must redefine culture," [he asserts,] "and we must get it out of our vocational training. It is all wrong to think of general culture as consisting of familiarity with a set of subjects, outside of our own specialty and unrelated to it. . . . [We] must departmentalize all our higher education, building up the departments along the lines of the great vocations, and even running this division down into the high school. . . . *We must insist upon the concept that general culture—not special merely, but general—is to be won out of rightly specialized professional training.*"¹

In our colleges and universities for women would it not be possible to map out courses in architecture, journalism, education, home economics, public health

¹ "Differentiation of College Education for Women," in *Jour. of Coll. Alum.*, 1912, p. 253 Italics mine.

nursing, and civil service, to mention only a few, which should be so vitally related to community problems and aims and so broadly conceived as to make generous use of the natural and social sciences, the arts, history, literature, as well as the technique that go to the making of our rich human heritage? What architect but needs to know much of the history of his art in its relation to the civilization of various peoples; to understand the exact and applied sciences that are the groundwork of building; to be inspired by the great artistic ideas and achievements of past ages; and to gain sympathetic insight into the peculiar genius, the strivings for ideal expression, of his own nation? Such a course could hardly, it would seem, fall under the ban of narrow specialization, since its main current of interest would be fed by inflowing streams from a broad and diversified area.

The Case for Advocates of Vocational Education.—Like the protagonists of liberal culture, the advocates of a vocationalized higher education draw their chief strength from their criticisms of their opponents' position. Their attacks on the current conception of liberal education are admirably designed to expose the weak places in this historic theory. Interestingly enough, the men who most effectively espouse the cause of liberalized vocational training,—such men as John Dewey, ex-President Eliot, Dr. Ernest Moore, Felix Adler, and Alexis Lange,—are themselves the finest products of the old liberal education. But their long experience as educators has convinced them of the necessity of a radical revision of the prevailing ideas of culture in the interests, not alone of social well-being, but of culture itself.

The Social Waste Involved in Present Cultural Education.—These men, and others in agreement with them, point out that the present system of liberal education results in loss both to society and the individual. On the social side the loss is summed up in the fact that every year thousands of young women are graduated with the bachelor's degree who are quite unfit to undertake any form of skilled work and who, in too many instances, have never been inoculated with the idea that they are debtors to society for some form of useful service. Of 16,739 women graduates of eight eastern colleges and one university who responded to a questionnaire sent out in 1915 by the Association of Collegiate Alumnae, more than 30 per cent. had never been gainfully employed.¹

No doubt a proportion of this group of over 5,000 young women performed some useful work in the home. But in some instances at least this was probably sporadic and unorganized; and in the case of those who did no household service we have clearly a body of college trained women living in a condition approaching social parasitism. It is of this group, highly privileged as regards educational opportunity and yet to a large extent socially unproductive, that Professor Lange is thinking when he writes:

“For women no less than for men a higher education that prepares only for leisure and perhaps a purely decorative or parasitic life should be a thing of the past. . . . Women, perhaps more than men need to be warned against making a college course a thing for individual subjective satisfactions.”²

The loss to society of the skilled services of the

¹ See “A Census of College Women,” in the *Jour. of Assoc. of Coll. Alum.*, May, 1918, p. 560.

² *The Problem of the Professional Training for Women*, in *Sch. and Soc.*, III: 481, April, 1916.

thousands of women who are yearly graduated from American colleges and universities with little or no interest in socially useful work and no intention of fitting themselves for it can hardly be exaggerated. Nor do the advocates of cultural education meet this criticism when they point to the graduates of Vassar and Wellesley, of Smith and Bryn Mawr who have distinguished both themselves and their colleges by the high character of their social service. What society is coming to demand and will increasingly demand is that every young woman who has enjoyed the benefits of higher education shall make solid returns to society in the form of skilled or constructive work. Our higher institutions of learning are sending out into the world too many women deficient in that social culture which expresses itself in broad and intelligent social interest, developed social sympathy, and power to do something of social utility.

But the loss to society does not end here. The "human wealth represented by college women is very unsatisfactorily distributed if not actually wasted." A very high proportion of the college women who take up gainful employments after graduation enter the field of teaching. This is made abundantly clear by the *Census of College Women* so frequently referred to. Of the 11,663 graduates of nine eastern institutions who had been gainfully employed at any time 83.5 per cent. had been teachers!¹ The reason for so large an influx of college women into teaching is obvious enough, although its justification is not so apparent. Teaching is, of course, the path of least resistance for those women who desire to utilize as

¹ *Op. cit.*, p. 580.

promptly as possible the information they have acquired in college as a means of gaining a livelihood; and until recently, not much professional training has been required of college graduates. Therefore economic pressure, together with lack of information about the skilled vocations open to women, is largely responsible for the disproportionate number of college women in the teaching profession.

It would be a courageous advocate of the old culture who would seek to maintain that all these intelligent young women enter the field of teaching from sheer love and fitness for the work. Far too many square pegs are seeking to accommodate themselves to round holes in this profession, as in others; and the loss to society is real and serious. For not only is it true that a considerable number of these young women could render a more valuable service to the community in another kind of work, enlisting more fully their peculiar aptitudes, but it is also true that the failure of higher educational institutions for women to develop *initiative* in a larger proportion of their graduates represents an irreparable social waste. Surely an intellectual quality of such signal advantage to society should not be left to chance or solely to the mercies of college clubs and class organizations. The atmosphere of academic aloofness from the concerns of every-day life which surrounds many of our higher institutions of learning is not calculated to encourage students to enter new fields of work or to apply knowledge to current social questions. An example of college women's failure in initiative is shown in the fact that they have never resolutely attacked the problems of family life and child-rearing in a scientific spirit.

Yet here is a field of investigation that would seem to be peculiarly their own. Miss Julia Lathrop, chief of the Children's Bureau in Washington, has called attention to this fact in more than one vigorous article.

"Nowhere," [she writes,] "is there any center for research and discovery, nowhere a center where choice minds are devoting their powers to the philosophy of the inevitable labors of the average household, to developing by original study improved care of the young who must be nurtured there, new expedients for enriching the lives of the adults who should be happy there. Nowhere patient research gives the authoritative sanction which would elevate into a national system, strong, free, elastic, the cult of the American family."¹

It is pertinent to add that the very emphasis laid by Miss Lathrop's own Alma Mater, and by other women's colleges, on a purely academic culture, revealing no "taint" of practical utility, is one of the outstanding reasons for the lack of interest and initiative of college women in a field historically their own.

The Loss to the Individual.—No less serious than the social waste is the individual loss resulting from our present conception of liberal education. Young women, at the close of an expensive college course covering four years, not infrequently wake with a start to the disturbing fact that they are quite unfitted to earn their living in any skilled vocation. More than once individual seniors of a liberal arts college have expressed to the writer their sense of dismay and disappointment when the realization dawned upon them that the college degree was not an Open Sesame to any profession except teaching, and not even to that in all localities. Only this year a student in a liberal

¹ "The Highest Education for Women," in *Vassar College Fiftieth Anniversary Volume*, p. 90.

arts college for women wrote in an examination this bitter indictment of her own education:

"The twentieth century student is cursed with all the cultural accumulation of historic times. Her education is likely to leave her burdened with the necessity of making her own choice of a career; and to that choice her college studies seem wholly irrelevant. At least, it is my case, that my work at school seems impertinent to my work after school. Education does not *discover* the student."

The problem of this young woman and, indeed, of thousands of others, is an economic one: how to relieve their parents, saddled during their college years with a heavy financial burden, from all further responsibility for their support. It is these young graduates, having little aptitude and desire to teach, who flock to the college bureaus of employment in the hope of finding highly paid positions immediately open to them. The reports of the Collegiate Vocational Bureaus published in the *Journal of the Association of Collegiate Alumnae* not infrequently contain laments over this situation. Thus the Kansas City Bureau writes in 1918:

"This office has been trying to get some enthusiasm for training among the women who come to it—training for some particular line, no matter what, just so it *is* training. We must stem the tide or we shall wake up and find the business world glutted with untrained college women . . . who have rushed in to take up the many opportunities open to women for which so few of them are equipped. There is a dearth of good stenographers, good bookkeepers, good *anything* but there is an overwhelming supply of women who wish good pay."

And the Pittsburgh Bureau writes in 1918 in the same strain:

"The need for special training beyond college education is being shown every day in the calls from employers, even in these war times, when the impression is abroad that any woman is in de-

mand. . . . For women with technical equipment in scientific work, social work, or secretarial work, for example, there is never a dearth of positions; for women who have had no previous experience, and who are interested in "anything" we have difficulty in finding a suitable opening, where their education can be utilized, and where such women would be satisfied with the salary and the future offered."

Surely this situation is far from satisfactory. Yet the colleges from which these young women have been graduated would almost certainly waive all responsibility for the conditions on the ground that their duty has been fulfilled when they have "exposed" their students for four years to the benign influences of liberal culture. After this "cultivation" has done its perfect work, let the young woman spend a year (or two or three years) more in fitting herself for professional work. But it is here that the shoe pinches. The woman of twenty-two¹ who needs to earn her living after college graduation can ill afford, and in some instances will simply not be able to afford, further expensive preparation for gainful work. The necessity for earning a livelihood is urgent and immediate. Such young women take what they can get and join the ranks of unskilled women workers. After years of such work they may utilize their scanty savings in securing a belated professional training. A flood of light upon the numbers of college women who are pursuing vocations other than teaching for which they have received no professional or technical training is shed by the *Census* of the A. C. A. Of the 471 graduates engaged in social work only 172, or 36.5 per cent.,

¹The *modal* age of 15,912 college women at graduation was found to be 22 years and less than 23. See *Jour. of Assoc. of Coll. Alum.*, May, 1918, p. 577.

had received training; of those in library work 55.3 per cent.; in business 23.1 per cent.; in administrative posts in education only 28.8 per cent. (!); in government service 39 per cent.; in art 58 per cent.; in religious work 33.3 per cent. In contrast with these figures the percentage of trained women in the historic "professional pursuits," i.e., law, medicine, theology, rose to 95.2. The total percentage of college women who had received professional or technical training after their college course was only 36.4.¹ What of the 1,411 young women (63.5 per cent. of the non-teaching group) who in 1915 were carrying on a vocation requiring skill and knowledge with no suitable preparation for the same? In the face of these facts (which apply only to the eastern colleges) it is difficult to see how educational institutions for women can still maintain that they are performing their full duty toward their students. If nearly two-thirds of a body of more than 2,200 college women are performing more or less unskilled work, in vocations outside of teaching, at whose door rests the responsibility? It would seem that the advocates of a vocationalized higher education might draw cogent arguments from these conditions.

As we have seen, another way out of the difficulty for the woman graduate is to become a teacher and to obtain a dubious "experience" in a rural or small-town school—for city schools are no longer willing to accept untrained and inexperienced teachers. Unquestionably the low salaries paid women teachers in the past have been due in some measure to the large number of untrained college women who have flocked

¹ *Op. cit.*, p. 571.

into the teaching profession. The *Census of College Women* shows that in 1915 the median salary of more than 3,000 college graduates in teaching was only \$995; and 521 (or 17 per cent.) of these women were earning less than \$700. It is hardly necessary to point out the marked inferiority of this wage to that of a carpenter, plumber, or mason, or even to the salary paid college women in other occupations for which they have been able to secure the requisite training. For example, the *Census* shows that in 1915 the median wage for social service work was \$1,132, for literary work \$1,216, and for government service \$1,300.

The intellectual loss which results to the individual from a rigid adherence to the old conception of liberal education is no less serious than the economic loss. Nine years ago the President emeritus of Harvard vigorously expressed his convictions on this matter:

"It is high time that our teachers and leaders of the people understood that every civilized human being gets the larger part of his life-training in the occupation thru which he earns his livelihood, and that his schooling in youth should invariably be directed to prepare him in the best way for the best permanent occupation of which he is capable. In other words *the motive of the life-career* should be brought into play as early and fully as possible. . . . We ought not to be surprised that the schools which avail themselves of this strong motive get the best work from their pupils and therefore do the best work for the community. All of us adults do our best work in the world under the impulsion of the life-career motive. . . . There is nothing low or mean about these motives, and they lead on the people who are swayed by them to greater serviceableness and greater happiness—to greater serviceableness, because the power and scope of individual productivity are thereby increased—to greater happiness, because achieve-

ment will become more frequent and more considerable, and to old and young alike happiness in work comes thru achievement."¹

At this point many college teachers will admit that the heart of a serious educational difficulty is laid bare. What instructor in undergraduate courses has not struggled, with a sense of futility, against the blank indifference of a considerable proportion of his class—an indifference which develops in him the deadening conviction that try as he will, he has not succeeded in relating his subject to the life interests and purposes of his students. The loss of intellectual energy in education through the failure to connect studies with the vital interests and purposeful activities of the individual can hardly be measured. An appreciation of this loss leads a contemporary writer bitterly to attack American college education. He points out that the progress of civilization in government, in religion, and in industry has been marked by a movement "from the primitive principle of external force toward the use of the *self-generated dynamism within the individual.*" Nature has provided certain powerful motive forces within us which are not "set off by logical reason, argument, inducement, nor by any form of external compulsion." But once a goal is set by an individual for himself "it gathers force from the reservoirs of associated complexes—those, for example, of home-building, jealousy of competitors, personal adornment, protection of the object of affection. With these dynamic energies united in pursuit of one goal, obstructions are forced aside resistlessly, the nerve energy rises into higher and hitherto undeveloped

¹ Charles W. Eliot: *The Value during Education of the Life-Career Motive*, in *Proceedings of the N.E.A.* 1910, pp 135-6. Italics mine.

centers—fluency of language, poesy, idealization, altruism, chivalry, philosophizing, logical reasoning. The subject becomes supersensitively teachable. . . . This principle of dynamic energy exposes the folly and futility of attempting to prescribe the processes of education, and the greater folly of attempting to construct, through schooling, artificial mechanisms to take its place. . . .”

This is a powerful criticism and its special application to the college is left in no doubt.

“The clogging point in our educational log-jam to-day is without doubt the college. Here is the embattled stronghold of tradition. Because the college is the topmost part of the educational system its attitude commands the traditional respect of the people. . . . The current of reform in education cannot run with necessary force until the log-jam in the college gives way. What is needed is the courage of some first-grade college to break with tradition and set the logs rolling. Here is opportunity for the Great Adventure. Which one of our colleges has the vision to see it?”¹

Which eastern college of liberal arts indeed? At a time when thoughtful critics are attacking a type of education demonstrably wasteful, the heads of these colleges, as we have seen, are actively concerned in preserving from every blemish of modernism the classic ideal of culture. They fail to see that only a limited number, even of college women, are capable of attaining culture along the traditional lines of the college course; whereas the ideal of democracy is fully realized only when a liberal education is put within the reach of every individual to the extent of his ability. If once our higher institutions for women could be induced to abandon the notion that culture can be

¹ Frederick Burk, “Education by Dynamism,” in *Jour. of the Assoc. of Coll. Alum.*, December, 1917, pp. 217-25. Italics mine.

attained by only one path—the path of the present traditional curriculum—and could be led to see that divers minds of divers talents might become truly liberalized if only studies, methods, and goals were adapted to their natural gifts and life purposes, we should see a revitalizing of the higher education of women in America which would warm the heart and cheer the spirit of many a disheartened educator.

No doubt one of the obstacles to such reform lies in the rooted notion of college women themselves that vocational courses involve nothing but manual training. This conception of vocational education is clearly set forth by a Wellesley alumna in a recent article in the college *Quarterly*:

“Why is it not possible for colleges to give liberal courses and vocational work, too? Simply because it is not possible to serve two masters—to combine manual training and mental development in the four short years of a college course. The college must be the home of intellectual and spiritual culture, the hotbed of ideas; it must not swerve from its purpose of educating the thinking powers. Practice in mechanical arts, experience in work that will lead to prompt employment, is undoubtedly excellent, but it cannot be joined with liberal culture, in institutions that are devoted to young women between eighteen and twenty-two years of age.”¹

Such a statement as the above makes one wish for a pen dipped in persuasive eloquence that one might iterate and reiterate the fact that no educator of sound mind desires to lose a jot or tittle of the cultural values held in such high esteem by college women. Rather does he desire to enhance them and ensure them, so far as may be, to all students (not alone the chosen few who achieve them) by linking higher education to

¹ Martha Hale Shackford, '96, in *Wellesley Alumnae Quarterly*, October, 1919, p. 2.

those motive forces of the human mind which, outside of our schools and colleges, play the controlling rôle in high achievement. It is *not* the mere training of eye and hand that can properly be called vocational education. Rather is it a development of native tastes and aptitudes, expressed in the "life-career motive," by means of rich and varied courses, involving free, self-expressive methods of thought and activity—such a development as will bear fruit in some degree of liberal culture for *every* woman, be her cardinal interest the teaching of Greek literature, industrial chemistry, or trained nursing.

Vocational Guidance and Training in Colleges.—The present situation in the higher educational institutions for women is not entirely hopeless. For nearly a decade these colleges and universities have been wrestling with the problem of vocational guidance of students without sacrificing their ideals of liberal culture. Several years ago Professor Elizabeth Kemper Adams declared that vocational guidance was a matter much in the public mind which the colleges were bound to face. She pointed out that college students "with the best intentions (are) pitifully ignorant and short-sighted and confiding in the planning of their college work." Therefore some form of vocational advising seemed justified on two grounds. "First, on the practical ground, it means simply doing expertly and with full information at our disposal what we are now doing haltingly and with half-knowledge. Second, on the educational ground, it means substituting some rational principle of selection of courses for the haphazard and trivial motives for selection now influencing a large number of college

students." Professor Adams gave it as her opinion that the present college curriculum without the addition of a single new course "furnishes subject-matter offering a direct approach to later professional work." If type courses, preliminary to different occupations now open to college women, were organized by wise instructors these courses might prepare directly for vocations "with no sacrifice of the cultural character of the college course."

This surely is wise, even if somewhat cautious advice. However, it does not appear that any of the women's colleges has followed Professor Adams' suggestion and prepared "type courses" leading to selected occupations. Not only is this true, but a study of the recent catalogues of these institutions reveals few studies (except, perhaps laboratory courses in chemistry, physics, and biology) which have a direct vocational bearing. Wellesley, however, has organized two departments of a distinctly vocational character which grant certificates at the completion of the course. One is the department of hygiene offering two years' work designed to train teachers of the subject; the second is the department of music which offers a four years' course of combined theoretical and practical work. Both Wellesley and Smith offer courses in education, but these are not directly preparatory to the teaching profession except in the case of Wellesley's *graduate* courses in secondary and kindergarten education. Most of the women's colleges furnish studies in applied sociology, such as the Vassar course in Charities and Corrections and the Wellesley course in Social Economics, which includes a study of dependents, delinquents, housing, sanitation, recreation,

and measures of reform. Few, indeed, of the eastern colleges for women afford opportunities for study of home economics. Only Wheaton, the youngest, and Elmira, the oldest of these institutions, have organized courses in this field.

But if women's colleges have done little to provide vocational courses for their regular students they have, under the stimulus of the world-war just ended, given promising evidences of their ability to organize such courses if they would. Relegated to the period of the summer session, new courses of training for definite forms of skilled work were introduced at Vassar, Wellesley, Smith, Mt. Holyoke, and Bryn Mawr. Vassar's three months' pre-nursing course, given to 430 college graduates in the summer of 1918, enabled these young women to finish the nurses' training course, in certain coöperating hospitals of excellent standing, in two years instead of three. An intensive course it was, demanding hard work and severe application on the part of the students. No one who visited this summer school and went, as did the writer, from class to class, could fail to observe the enthusiastic interest, the whole-souled willingness to work of these young women; nor could he fail to contrast it with the polite lethargy of many students in the "cultural" courses of liberal arts colleges.

But Vassar was not alone in the praiseworthy attempts to meet the need of the nation for trained women during the war. During the summer of 1918 Smith College offered a course of eight months' training for psychiatric aids. The purpose of the course was declared to be the preparation of "social workers to assist in the rehabilitation, individual and social,

of soldiers suffering from nervous and mental diseases, including war neurosis and so-called shell-shock." Clearly the directors of the course did not regard it as merely a war emergency training for they went on to state that "these workers would also be of permanent value in civil neuropsychiatric work as assistants to hospitals, courts, schools, out-patient departments, and social agencies." After two months of theoretical instruction at Smith College there followed six months of practice work in such well-known institutions as the Boston Psychopathic Hospital, the New York Neurological Institute, the Phipp's Clinic of Baltimore, and other centers affording "opportunities for social work with psychiatric cases under direction of trained social workers." Those of the sixty-three enrolled students who successfully completed the course were granted a certificate by a special committee of the National Committee of Mental Hygiene under whose auspices the course was given.

Summer courses of a distinctly vocational character were likewise established at Mt. Holyoke and Wellesley. The former offered a training course for industrial health specialists under the capable direction of Dr. Kristine Mann, health supervisor of the Women's Branch of the Industrial Service of the Ordnance Department. At the same time Wellesley took up the useful and timely work of training the managing heads of women's farm units. Bryn Mawr College also inaugurated, during the summer of 1918, an eight months' course of training for college graduates in the field of industrial supervision. This course was given in the Carola Woerishoffer School of Social Economy and Social Research, and included prepara-

tion for the following lines of work: employment managers, service or welfare superintendents, factory inspectors, investigators of industrial problems affecting women, industrial secretaries and industrial group leaders. The training involved academic courses at Bryn Mawr, followed by field work in manufacturing establishments in Philadelphia and New England.

It would be unwarranted optimism to hold that these vocational courses offered in eastern colleges for women, confessedly the strongholds of the historic ideal of liberal education, are a hopeful sign of future progress towards a truer conception of culture, one better adapted to the ideal purposes of an industrial democracy. Unhappily this encouraging beginning in women's colleges has been continued, since the signing of the armistice, in only two institutions. Smith College has organized a Training School for Social Work including courses in psychiatric and medical social work, community service and child welfare. Two months of lectures at the college during the summer are followed by eleven months of practical training in the field. Likewise Bryn Mawr has continued to offer courses in industrial management and research in its graduate school. Twenty-nine of the graduates of this course have obtained excellent positions as employment managers or in the research departments of firms carrying on industrial councils. But Mt. Holyoke has definitely abandoned the work of training industrial health specialists; and Wellesley states that its course for training managing heads of women's farm units "existed as a war measure for one year only."

If our American civilization is crude and materialistic, if the inner significance of human life

escapes us in our feverish effort to organize the mechanics of production, wherein does the remedy lie if not in a type of education which seeks "to use the vital, unspiritualized agencies of to-day as means of effecting the perception of a human meaning yet to be realized . . . ?" If a spiritualized and more beautiful civilization is to be developed from our present industrialized culture, must we not look to our college men and women in large measure to point the way? "To perpetuate in the name of culture the tradition of aloofness from realistic science and compelling industry is to give them free course in their most unenlightened form."¹

The possibilities of advanced vocational training for college women are, it is hardly necessary to say, far more promising in the state universities and western colleges for women than in the more conservative East. Not only did the former institutions offer in 1917-18 valuable war emergency courses, for which they granted academic credit, but their general policy seems to be more favorable to the theory that genuine culture may be attained through vocational training than is the policy of their sister colleges in the East. A study of the catalogues of the great western universities of California, Iowa, Michigan, and Wisconsin—to mention only a few—shows how far these institutions have gone in preparing their students for a life-work at the same time that they have sought to develop liberalized minds. California's Schools and Colleges of Education, Architecture, Jurisprudence, Medicine, Commerce, Agriculture, and Chemistry are

¹ John Dewey, "American Education and Culture," in *The New Republic*, Vol VII, p. 217 July 1, 1916.

all open to women and grant degrees on the completion of courses covering from four to six or seven years. Nearly two years ago this university tried the experiment of organizing a nurses' course of five years, combining study in the College of Letters and Science with practical work in the Nurses' Training School of the university. This course leads to a B.S. degree and a state nurse's certificate. Moreover California has recently (1918) established a professional course in public health leading to the degree of Graduate in Public Health.

In like manner the state university of Iowa offers its women courses in the School of Commerce and in the Colleges of Education, Law, Medicine, Dentistry, and Pharmacy. Michigan affords similar opportunities, together with courses in architecture, leading to the B.S. degree and in nursing leading to a nurses' certificate at the completion of a three years' course. The University of Wisconsin, in addition to its College of Agriculture and its Schools of Medicine, Law, and Music, has organized various departments in the College of Letters and Science which are definitely vocational in character. These are the departments of Chemistry (for training industrial, agricultural, physiological, and food chemists), Commerce, Journalism, Pharmacy, Library Methods, and Education. Also there is a Physical Education department for training teachers. All these courses are organized on a four-year undergraduate basis and lead to the bachelor's degree in science or arts. At the University of Wisconsin, then, renowned for its intelligent attempts to meet the educational needs of the people of the state, it is possible for young women in under-

graduate work happily to combine professional training with those studies which broaden the outlook on life, develop the power of thought and quicken the appreciation of beauty and truth. The same holds true of Mills College, California, which has courageously broken with tradition and offers courses in education, home economics, household science and art, library science, physical education designed to train teachers, and pre-medical and pre-nursing courses.

Clearly it is the western colleges and universities admitting women which have gone farthest along the road of a much-needed educational reform. Not only have the state universities accomplished measurable results in bridging the gulf between liberal and vocational education but such women's colleges as Milwaukee-Downer and Mills College show a commendable desire to adapt their educational offerings to the needs and special aptitudes of their students. Both colleges offer courses of a vocational character in art, home economics, hygiene and physical education, and music; and in addition Mills College affords training in library methods, education, and nursing.

Many of the leaders of women's higher education who have taken a firm stand against the introduction of vocational studies into the classic atmosphere of liberal arts colleges have nevertheless admitted that some steps must be taken to put college women in touch with a new world of vocational opportunities. It is noteworthy, however, that the first advance in this direction was made by the Women's Educational and Industrial Union of Boston when, in 1910, it

established an appointment bureau to aid college women in securing skilled employment other than teaching. In New York City the local alumnae associations, representing nine colleges or universities admitting women, established the Intercollegiate Bureau of Occupations in 1911.¹ This bureau, like the Boston organization, has done a valuable work in placing college women and conducting investigations of existing and new vocational opportunities for trained women. Similar bureaus have been established in Philadelphia, Chicago, Pittsburgh, Omaha, San Francisco, and, indeed, in most of the large cities of the country. The colleges themselves, however, have been content to maintain employment bureaus to assist their students in securing positions after graduation. These college bureaus seek also to keep in touch with the work of the intercollegiate bureaus of the cities. Several eastern colleges go a step farther and employ every year a lecturer, well informed concerning the callings open to women, to hold a vocational conference of a few days' duration. During this period the vocational adviser not only gives the upper class students a survey of the field of women's gainful occupations but also discusses with interested individuals the training requisite to prepare for a specific vocation and the outlook for advancement and growth in that type of skilled work.

This is good as far as it goes; but it has been the primary purpose of this chapter to point out the real evils which result from a divorce of liberal and vocational training,—the unsocial and often purely academic character of the one and the too specialized char-

¹ Went out of existence in 1919.

acter of the other. The utilization of the dynamic force of interest in a chosen life-work to lead the student out into the fertile and varied fields of human culture is the outstanding educational problem of this industrial age. It is idle to proclaim that the problem has been solved save in individual instances. Neither the college of liberal arts nor the vocational college has yet convincingly shown the way by which cultural education may be infused with social purpose and efficiency and vocational education may be so enlarged in scope and significance as to become truly liberalizing to the mind.

SELECTED READINGS

ADAMS, ELIZABETH K., "Vocational Opportunities of the College of Liberal Arts." *Jour. Assoc. Coll. Alum.*, pp. 256-62. April, 1912.

ADLER, FELIX, "Differentiation of College Education for Women." *Jour. Assoc. Coll. Alum.*, April 1912

ELIOT, C. W., "Value during Education of the Life-Career Motive." *Proc. of N.E.A.* 1910, pp. 133-41

HARKNESS, MARY LEAL, "The Education of the Girl." *Atlantic Monthly*, pp. 324-30. March, 1914.

HOLLINGWORTH, LETA S., "The Vocational Aptitudes of Women," In H. L. HOLLINGWORTH, *Vocational Psychology*, Ch. X.

"Intercollegiate Conference on Vocational Opportunities for Women." *Education*, XXXVIII: 557-77, April 1918.

KINGSBURY, SUSAN, "The Economic Efficiency of College Women." *Jour. Assoc. of Coll. Alum.*, pp. 19-30. 1909.

LANGE, ALEXIS F., "The Problem of the Professional Training for Women." *Sch. and Soc.* III: 480-85, April 1916.

MATHEWS, LOIS KIMBALL, *The Dean of Women*. Ch. IV. 1915.

MOORE, ERNEST C., *Is the Stress which is now being put upon the Practical Studies interfering with the Idealistic Training of our Girls and Boys?* *Sch. and Soc.* V: 361-67.

SYKES, FREDERICK H., "The Social Basis of the New Education for Women." *Teachers College Record*, XVIII: 226-42. May, 1917.

TAYLOR, JAMES M., "Vassar's Contribution to Educational Theory and Practice." *Fiftieth Anniversary of the Opening of Vassar College*, pp. 26-32. 1916.

THOMAS, M. CAREY, "The Curriculum of the Woman's College." *Jour. Assoc. of Coll. Alum.*, X: 585, May, 1917.

WOOLLEY, MARY E., "The College Curriculum as a Preparation for Life." *Jour. Assoc. Coll. Alum.* X: 591.

CHAPTER VI

THE VOCATIONAL EDUCATION OF WORKING GIRLS

The Influx of Girls into Industry.—“When a pharmacist compounds a prescription he knows what effect the various elements have on each other. When a manufacturer starts a piece of raw material on the road toward a finished product, he can account for the smallest change, the minutest process. But when a child starts on the bleak road which leads from one deadening occupation to another, who can chart his path or gauge the forces that mold and shape his future life.”¹

Several years ago it was estimated that the children in the United States between 14 and 16 years who start “on the bleak road which leads from one deadening occupation to another” numbered more than 6,000,000. And the overwhelming majority of this child army had received no vocational training other than the manual or industrial arts courses of certain of the public schools. The steady growth in numbers of children entering industrial pursuits is shown by recent figures for New York City. In 1917, 39,000 children under 16 took out working papers, whereas in 1918 the number had swelled to 50,700; an

¹ Woolley, Helen T., “Charting Childhood in Cincinnati.” In Bloomfield, *Readings in Vocational Guidance*, p. 220.

increase of 30 per cent.¹ No doubt a part of this large increase was due to the fact that the nation was at war; but this accounts only in part for the situation. As early as 1909 Miss Florence Marshall, then director of the Boston Trade School for Girls, stated that "in some of our cities 77 out of every 100 girls (16 to 20) are working for pay outside the home" and thousands are working in factories in unskilled industries.²

A menacing factor in the situation created by the stream of girls into paid employments is the large percentage who leave the schools before completing the eighth year of the elementary course. The *Report of the Commissioner of Education* for 1917 shows that of the 18,375,225 children of both sexes enrolled in elementary schools throughout the country 68.48 per cent. were in the first four grades and only 6.36 per cent. were enrolled in the eighth grade.³ It has been estimated that one-half of the children who take out working papers have not completed the fifth year of school. This estimate is probably too high, although it receives some support from a recent study made in the stockyards district of Chicago, where it was found that of 1,222 girls in three elementary schools only 26.2 per cent. were retained to the eighth grade. A further study of 300 of the girls who "took out their working papers" before completing the elementary course revealed that 65 per cent. were below the seventh grade.⁴ Miss Van Kleeck's study

¹ "Vocational Guidance in New York City," in *Outlook*, February 26, 1919.

² "How to Conduct a Trade School for Girls." In *Nat. Soc. for the Promotion of Indus. Ed.*, Bulletin 9, June 9, 1909.

³ Vol. II : 38.

⁴ Montgomery, Louise, "The American Girl in the Stockyards' District," in Bloomfield, *Readings in Vocational Guidance*, pp. 462, 467.

of 7,854 working girls in New York evening schools was more favorable, showing that 16 per cent. left school before reaching the seventh grade and nearly 32 per cent. withdrew before reaching the eighth grade.

The causes of this high school mortality have frequently been discussed. Unquestionably the indifference of parents, especially the foreign born, to the education of girls beyond the compulsory age, the pressure of economic necessity, dislike of school, and the desire of girls to earn money all enter as factors. A vocational survey conducted in Minneapolis in 1915 showed that some of the more frequent reasons for leaving school were as follows:

Ill health—5.7 per cent.

“Had to go to work,”—35.5 per cent.

Child’s desire to earn—8.2 per cent.

Dislike for school or lack of interest in it—29.5 per cent.

Belief that further schooling was not worth while—14.2 per cent.

From these alleged reasons it will be seen that, whereas economic necessity was responsible for 35.3 per cent. of the school mortality, dislike of school or failure to appreciate its value was responsible for 43.7 per cent. Miss Susan Kingsbury’s study in Massachusetts revealed that only 24 per cent. of the children of the state left school because of real financial pressure; and Miss Woolley’s investigation of 650 families in Cincinnati showed only 27 per cent. which needed the children’s earnings. Of 300 girls in the Chicago stockyards district who had left school before completing the elementary course, only twelve went unwillingly; the remaining 288 “had a more or less pro-

nounced dislike of school, as shown by their trivial reasons for leaving. . . .”¹

It appears probable, then, that the primary reason why our girls are leaving school for industry is not economic pressure but the failure of the school to enlist their interest and to approve itself as worth while.

The effects of so large an influx of uneducated and untrained girls into industrial pursuits are obviously bad both for the girl and for industry. The large labor turnover in factories and stores is the source of enormous annual loss to employers and has a deplorable effect upon the workers themselves in developing the habit of drifting from place to place with a progressive loss of industrial capacity and interest in work. What growth in skill and intelligence can be expected of girls with employment histories like the following, which is drawn from records kept in Milwaukee?

A GIRL FIFTEEN YEARS OF AGE²

| | |
|---------------------|-------------------------|
| Sept. 17, 1913..... | Western Leather Co. |
| Oct. 1..... | Badger Candy Co. |
| Oct. 3..... | O. S. Hansen Mfg. Co. |
| Oct. 8..... | Unemployed |
| Oct. 9..... | Robert A. Johnstone Co. |
| Oct. 19..... | Campbell Laundry Co. |
| March 10, 1914..... | Unemployed |

It seems reasonably certain that such occupational shifting, with its attendant loss to the girl and to industry, can be largely prevented by the establishment of trade or continuation schools. In 1915 the public school authorities in Boston collected some

¹ Montgomery, *op. cit.*, p. 462.

² See Leake, *The Vocational Education of Girls and Women*, p. 259. This and other quotations from this work are reprinted by permission.

significant figures bearing on this question. It was found that, before continuation schools were established in that city, children who left the elementary schools to go to work changed their places of employment on an average of three or four times a year. During the first year after continuation schools were opened, only about 15 per cent. of 2,300 children in attendance on these schools changed their occupations.¹

Development of Girls' Trade and Continuation Schools.—Despite the serious problem created by the entrance of large numbers of untrained girls into industry, public sentiment in favor of vocational education has been slow in developing.² Almost nothing was done to train women for wage-earning until the Women's Educational and Industrial Union was organized in 1877. Girls' trade and continuation schools are still in their infancy, for most of them have been established since the opening of the twentieth century. The pioneer in this field was the Manhattan Trade School opened in 1902. Two years later a Girls' Trade School was established in Boston, which was followed by the organization of similar schools in Milwaukee, Chicago, Worcester, New Orleans, Philadelphia, and other cities. From the first, girls were discriminated against in favor of boys in the establishment of industrial schools. In 1910 the *Report of the Commissioner of Education* showed that, of approximately 193 trade schools throughout the country, only about 26 were established for girls.² Most of the schools were located in the manufacturing states of the northeast. In recent years continuation schools or classes, for

¹ *Report of the Commissioner of Education, 1915-16, Vol. I: 170.*

² *Op. cit.* See tables pp. 242-52.

girls as well as boys, have been organized in connection with many city school systems, notably in New York, Chicago, Philadelphia, and Boston. Yet it can hardly be claimed that more than a small beginning has been made in the organization of systematic vocational education for girls and women. This is made evident by the third report of the Federal Board for Vocational Education (Vol. I: 220, Table 18).

NUMBER OF FEMALE PUPILS ENROLLED IN TRADE OR
INDUSTRIAL SCHOOLS IN THE UNITED STATES FOR THE
YEAR ENDING JUNE 30, 1919

| | |
|------------------------|-------|
| Evening schools..... | 1,391 |
| Part-time schools..... | 5,340 |
| All day schools..... | 2,058 |

To these numbers should be added 1,495 girls enrolled in the Manhattan Trade School.

Present Tendencies in Vocational Education.—A few significant tendencies in the general movement for vocational education deserve brief consideration. One of these trends is toward the organization of state systems of vocational training.¹ In 1915-16 there were eight such systems in the states of Maine, Massachusetts, New York, New Jersey, Pennsylvania, Indiana, Wisconsin, and New Mexico. As early as 1914-15 Massachusetts boasted 77 state-aided vocational schools in 39 cities; while Pennsylvania had organized continuation schools in 98 districts of the state.¹

Closely allied to this centralizing movement is that in the direction of granting Federal aid and encouragement to education in trades and industries. By the terms of the Smith-Hughes Act, enacted in 1917, a Federal Board for Vocational Education was created, among whose most important duties it is to coöperate

¹. *Rep. of the Com. of Ed.*, 1915-16, Vol. I, Ch. IX.

with the states in the promotion of vocational training in agriculture, home economics, trades, and industries. This coöperation takes the form of (1) preparing reports and investigations to assist the states in the establishment of state systems of vocational schools, and (2) allotting Federal funds to those states which comply with the conditions of the act, on the basis of population. The appropriations of the Government for trade and industrial education provide (1) for the payment of salaries of teachers of trade and industrial subjects; (2) for the training of teachers in those subjects. The initial appropriation for salaries is \$500,000, rising to \$3,000,000 in 1926, this amount to be annually appropriated thereafter. The appropriation for training teachers rises from \$500,000 in the first year to \$1,000,000 at the end of the third year, when this amount becomes an annual appropriation.

Up to January 1, 1918, 48 states had accepted the Smith-Hughes Act and had submitted plans which were approved by the Federal Board. As a result federally aided courses in trade and industrial subjects have been set up in 32 states and teacher training courses have been organized in 46 states. The record of the states in this work is characterized by the Commissioner of Education as "impressive." For example, Massachusetts is offering federally approved instruction in trade and industrial subjects in 36 schools, New York in 40, Pennsylvania in 131, California in 14, and Indiana in 21,—and this in an initial period of only ten months.¹

A third tendency in the general movement for voca-

¹ *Report of Commissioner of Education, 1918*, p. 28.

tional education, and one already becoming fairly well organized and effective, is that toward vocational guidance of girls and boys. This movement was inaugurated by Professor Frank Parsons in the opening years of the twentieth century. At the Civic Service House in Boston, which was organized in 1901 by Meyer Bloomfield, Mr. Parsons began his work of giving vocational counsel to young people. Largely owing to his faith and enthusiasm, the Boston Vocation Bureau was opened in the spring of 1908 and the work of giving intelligent vocational guidance to girls and boys about to enter the industrial market was greatly extended. From these beginnings the vocational guidance movement has spread from coast to coast and is assuming nation-wide importance. The useful work of the Boston Vocation Bureau led to the establishment of a Vocational Guidance Department in the Boston public schools. Since then some form of vocational counselling, although not always carried on by a central bureau, has been organized in most of the larger cities throughout the country. Even the universities, here and there, are conducting courses in vocational guidance.

The vocational guidance movement had not proceeded very far when it became evident to its leaders that intelligent counselling required, not only a knowledge of the aptitudes and tastes of the child seeking guidance, but also a definite working knowledge of the industrial openings in different communities, with a view to determining whether these openings held out chances for personal growth in skill and intelligence as well as for economic advancement. The perception of this need for more accurate understand-

ing of the working conditions children are forced to meet has resulted in recent years in a number of vocational surveys of which the Portland, Minneapolis, Richmond, and Cleveland Surveys are among the best known. The information which such a survey should secure has been classified by Dr. Richards, Director of Cooper Union, under the following main heads:¹

1. Economic data
2. Physical and hygienic conditions
3. Influence of the occupation on the character and growth of the workers
4. Opportunities for beginners
5. The relation of the occupation to school training

A study of this outline in full will show that the questions taken up are fairly searching and comprehensive and embody the experience of nearly twenty years in grappling with the problem of the vocational training of youth.

Problems in the Vocational Education of Girls.—The serious student in the field of vocational education for girls cannot go very far without being confronted by difficulties. One of the most obstinate of these may be embodied in the question: 'Is it practicable to give vocational training for all industries? In any attempt to answer this question a distinction must be made at the outset between the more mature girls, sixteen years of age and over, and the girls between fourteen and sixteen who have left school to go to work at the earliest moment permitted by the law. Obviously the older girls, who have had the benefits of general and vocational education for a longer period, are far more useful to employers than

¹ See Brewer, *The Vocational Guidance Movement*, pp. 130-32.

the more immature and ignorant girls whom managers characterize as "childish," "frivolous," and full of "kinks." Child labor laws of many manufacturing states forbid children under sixteen to operate dangerous machinery. These conditions serve to keep the younger girls out of skilled occupations, such as power-machine operating, which demand some degree of maturity and education beyond the elementary grades, and hence are closed to girls between fourteen and sixteen. In consequence the situation which Miss Davis found in Chicago could be duplicated in most industrial centers throughout the country:

"It has been found that there are very few positions which offer even a little training to children under sixteen years; that usually the only skill required in any work is speed; that many employers do not want children under sixteen years of age because the law permits them to work only eight hours a day and because they are so small and unreliable that it is not worth while to bother with them; . . ."¹

Clearly, then, decided advantages accrue to the girl who enters a wage-earning career after sixteen. To her are open such skilled occupations as office work, millinery, dressmaking, salesmanship, and power-machine operating in the clothing trades. In these employments there is *opportunity for growth in manual skill and intelligence*; therefore the problem of vocational training for such pursuits is relatively simple. Most of the trade and continuation schools for girls, as well as the practical arts high schools, offer courses which fit the student to enter some, at least, of these occupations. In most localities girls

¹ "A Brief Statement of the Work of the Vocational Bureau and the Joint Committee for Vocational Supervision," in *Nat. Voc. Guid. Assoc., Proc., 1914*, p. 52.

who wish to become telephone operators must be at least seventeen years of age. Frequently they are also required to have had some high school training. In Boston, for example, there were in 1912 only 13 per cent. of the girls in telephone service who had not studied in high schools for varying periods of time.

What is greatly needed at the present time is a series of investigations into the educational content of the various skilled occupations which are open to girls sixteen years of age or over, as well as those to which they may soon be admitted. Where such educational content exists it may be made the point of departure for thoughtfully planned courses in both the theory and the practice of the trade. Unfortunately few investigations have been undertaken that approach in thoroughness and scope that made by Miss Cleo Murtland and Dr. C. A. Prosser in the dress and waist industry. This study was undertaken because of "a growing conviction on the part of those actively engaged in the promotion of industrial education in New York City that the body of the workers in the garment trades, are, under present conditions, at least, to be reached and trained through the use of part time schools."¹

The general plan of the investigation included (1) a study of the opportunities in that industry for self-development and earning power; (2) the working out of a scheme of education that would meet both the demands of the workers for self-development and the demands of the industry for skilled workers; and (3)

¹ *Conciliation, Arbitration and Sanitation in the Dress and Waist Industry of New York City*, pub. by U. S. Dept. of Labor.

the elaboration of a plan for part-time schools that would enlist the support of employers and workers on the one hand and of the public on the other. At the outset the investigators saw clearly that no satisfactory educational scheme could be formulated which was not based on a careful analysis of the various operations included in the dress and waist industry, the qualities demanded of the workers, and the knowledge required—general as well as technical. The *Report* furnished such an analysis, together with a detailed account of the methods by which the girl enters the industry, the demand for workers, wages paid, length of working year, and opportunities for promotion. Such facts Leake characterizes as “standard information,” lacking which “many of our attempts at industrial education have been initiated almost in the dark, and have achieved some measure of success owing to the fact that any kind of education is better than none.”

The Problem of the Girl in Unskilled Occupations.—Far more baffling, however, than the educational problem presented by the relatively mature girls sixteen years and over is that created by the thousands of young girls between fourteen and sixteen flocking into the unskilled industries—occupations in which there is a minimum of opportunity for mental development and a maximum demand for rapid, automatic operations. A recent study of 2,366 Cincinnati children who had taken out working papers revealed that the occupations the girls were entering were those offered by shoe, paper box, and candy factories, department stores, and tailoring and sewing trades. Of the educational value of this work Miss Woolley says:

"Very little of the work represented has any value as trade education. Each child in a shoe factory performs from one to three of the 150 or more operations necessary in making a shoe. They lace shoes, ink edges, or wet soles. The girls in tailor shops pull bastings, or baste one kind of seam. . . . The department stores use these young children for inside errands and for wrapping packages. A few of them have a chance to become saleswomen if they are fitted for it, but in Cincinnati saleswomen are paid such low wages that the occupation can scarcely be classed as skilled."¹

Miss Anne Davis's investigation of the industries open to Chicago children between fourteen and sixteen disclosed similar conditions:

"Most of the employment open to these young wage earners is offered by box factories, candy factories, tailor shops, and department stores. Even some individual establishments in this group have raised the minimum age of all their employees to sixteen because the younger boys or girls are too 'childish,' and they have found it 'an economic waste to bother with them.'"

Other industries in Chicago employing young girls in routine operations were engraving, boot and shoe manufacturing, molding and picture-frame manufacturing, knitting (cutting threads, sorting, wrapping), laundry work (shaking and marking clothes), book-binding (feeding wire stitching machines), novelty work, and press clipping. Of these occupations Miss Davis writes:

"It can readily be seen that all of this miscellaneous work open to the child under sixteen is of an unskilled nature and furnishes little or no training that may later prove valuable. Children are likely to get into the rut of factory work, losing all incentive and ambition to progress, or to acquire the habit of continual shifting from one job to another. . . . In every case the years between fourteen and sixteen spent at work afford little gain either in money

¹ "Charting Childhood in Cincinnati," in *Readings in Vocational Guidance*, 225-6 Reprinted by permission of Ginn and Company, publishers.

or training and mean much actual loss in strength and mental development.”¹

Surely it is high time, in view of these conditions that, not alone educators, but all men and women having a sincere regard for the interests of society, should grapple with the problem of the vocational preparation of these girls in a spirit of broad-minded intelligence and with resolution to see it through. Supine acceptance of a social situation which deprives thousands of young girls, endowed with capacities of intelligence, initiative, imagination, and enthusiasm, of all interest in and incentive for work, and which breeds in them a restless desire for change, will result in an economic and moral waste that will react disastrously upon the society that permits it.

The Problem of Educating Skilled Workers for Highly Specialized Industries.—The remedy for this condition most commonly proposed is that of furnishing more generous opportunities for general education and industrial training to girls fourteen and over, by means of trade or continuation schools. A prominent labor leader, discussing the failure of American industries to develop skilled workers, says:

“The public school is being called upon to assist the shop and factory in an effort to bring about a revival of skill. There is no doubt that the school will do its part. Action must be taken, however, to compel employers to do their share by so conducting the industries that it will be possible for industrial skill to grow and develop. Production is neither efficient nor economical unless the process develops increased knowledge and skill for the purpose of additional and continued production.”²

¹ *Occupations and Industries Open to Children between Fourteen and Sixteen Years of Age*, pub. by the Board of Education, Chicago, 1914. Also see Bloomfield's *Readings*, pp. 542-56.

² *Life and Labor*, Jan., 1921.

But such a proposal fails to take note of one of the most difficult of all the problems in this field, namely, how to find, in our highly specialized industries, enough skilled positions for the girls who have been trained. "Far more important," declares Leake, "than the lack of skilled workers is the lack of opportunity to use skill in the various industries." What course of industrial training, however intelligently mapped out, can make the work of stuffing olives in bottles, lacing shoes, or pasting labels for nine hours a day anything but a deadening routine? In this connection Leake cites the case of catchers in cigarette factories who, during a ten-hour day, will catch and examine from 130,000 to 150,000 cigarettes. We are told that the movements of girls who pack cigars in boxes "soon become mechanical so that the packer keeps her hands and body moving unconsciously even when she is not packing."¹ It is this situation which confronted Miss Anna Hedges when she made a study of 617 girls working in factories. The purely mechanical character of the work forced her to the conviction that "trade schools belong to the past when preparation for trades was needed."²

But it may be argued by those of an optimistic frame of mind that, even if vocational education has little direct bearing upon the monotonous work of thousands of factory girls, yet it gives them a broader outlook upon the meaning and value of their work when viewed in relation to the needs of society. To the mind of the writer this amiable theory rests upon

¹ Leake, *op. cit.*, p. 265, quoting *Report of Bureau of Labor Statistics*, Vol. 18, on "Women and Child Wage Earners in the United States."

² *Wage Worth of School Training for Girls*, Teachers College, Columbia University, Contributions to Education.

dubious foundations and represents an attempt to whitewash a situation requiring more radical treatment. Peculiarly Teutonic in this connection seems the pronouncement of the late Professor Münsterberg:

"There is no laborer in a mill, no salesman in a store, no newspaper boy on the street who cannot and ought not to feel that he is a little wheel in the gigantic mechanism, a necessary part for the whole. The ideal fulfillment of the economic work of the nation ought to be the inspiration for everyone who does a useful service, even in the humblest position."¹

Now it is possible that the cigarette-catcher mentioned above may be led by a course of industrial training to be inspired by the thought of herself as "a little wheel in the gigantic mechanism" of the nation's economy which she is helping on to its "ideal fulfillment"! But what man or woman who resolutely faces facts will believe it? Are we not, then, confronted at this point by a parting of the ways? Either we must accept and make the best of a mechanized system of industry, in which labor operations will become increasingly specialized and automatic, especially in the case of women, or we must find some means of reorganizing industry in the interests of human life.

Needless to say it is the first alternative—the acceptance of the present industrial system accompanied by efforts toward its amelioration—which commends itself in general to educators and social writers. Within this group, however, there is not entire agreement with respect to the problem of training youth for industry. Mr. Leake, whose excellent study of the *Vocational Education of Girls and Women* has so frequently been cited, has sincerely attempted to envisage

¹ *Vocation and Learning* (1912), pp. 17-18.

the present situation in all its aspects and find some way out which will not sacrifice the mental and moral development of girl workers. His conclusions may be briefly summed up as follows:

The supply of unskilled workers must be reduced (a) by placing on the statute books and enforcing compulsory attendance in every state; (b) by raising the age of compulsory attendance to sixteen years. The objections sure to be raised against the latter measure, viz., that it will cripple industries needing unskilled workers, and will inflict hardship upon parents dependent upon their daughters' earnings, Mr. Leake attempts to meet. To the first objection he opposes the proposition that "young human life is too precious and too vital to the future welfare of the nation to be cramped into a mold to meet the demands of subdivided, highly specialized, and commercialized industries. The industries should exist for the girl and not the girl for the industries, and until this view is recognized the education of our girls will not be such as is demanded by a real civilization." Moreover these girls are "the future wives and mothers of the race"; and those who know the industrial conditions under which they work will not question that the "future of the race is imperilled by the too early entry of young girls into industries." The author even makes the audacious statement that the future well-being of the race depends more upon the "state of health" and "poise of mind" of these girls "than it does upon the commercial success of our industries"!

The argument that the earnings of girls between fourteen and sixteen are needed by their parents Mr. Leake frankly admits to be valid, although he brings

forward a considerable body of evidence to show that the estimates of family need vary greatly in different localities, from twenty per cent. of the cases investigated to seventy per cent. (in a single instance). Five of the seven investigations cited show the percentage of families in need ranging from twenty to forty-five. In only two cases was the percentage above forty-five. But, conceding the existence of considerable economic need among families, Leake meets the objection by declaring that where "hardship is really felt by the withdrawal of the child's earnings, this hardship might be avoided, or considerably lessened by scholarships or maintenance allowances. . . . The state would be fully justified in making such allowances."¹

Most persons will agree that the three measures advocated by Leake, viz., (1) raising the school age to sixteen years and offering both general and vocational education for the last two or three years; (2) making compulsory the attendance of all girls up to this age; and (3) paying maintenance allowances to parents who would suffer hardship from the enforcement of the act seem eminently sound and desirable. But it is plain that such provisions merely postpone the problem of the kind of training which it is worth while to give young girls who will leave our vocational schools at sixteen to enter highly specialized and unskilled industries. Mr. Leake is not optimistic on this question. He reluctantly admits that the "time when every worker will be able to find congenial employment is far distant." But he anticipates that when "the supply of unskilled labor fails, industry will accommodate itself to the change, and by reason of a process of

¹ *Op. cit.*, pp. 260-68.

readjustment find different work for those who are employed in monotonous, soul-wearying tasks." This is encouraging. Yet the question will intrude itself as to how the accommodation is to be brought about. For it seems reasonably clear that no readjustment which is not in the immediate interest of employers can hope for serious consideration and trial so long as a sufficient supply of sixteen-year-old girls can be secured to perform unskilled operations.

In the interim, while industry is accommodating itself to a restricted supply of immature labor, Mr. Leake maintains that the girl workers employed in routine tasks must be given education for leisure. More generous leisure, he believes, is bound to come as a result of shortening the hours of labor. This will provide opportunity for an "avocational education" of girls quite outside the industry in which they work. He suggests classes for physical education and recreation, including folk dancing, games, and physical drill to music. Courses might also be offered in personal hygiene and the amount and kind of food necessary to efficient living. In the case of girls too tired or indifferent to attend classes for serious study clubs might be substituted—"dramatic clubs, reading and story-telling clubs, embroidery clubs—etc." Also, moving pictures might be put to use in bringing to these girls the best literature dramatized for the machine.¹

It is obvious enough that Mr. Leake accepts the present organization of industry only to deplore it. He looks forward to the day when not only will the industries "exist for the girl and not the girl for the

¹ *Op. cit.*, pp. 268-70.

industries . . .” but when there will be equality of educational opportunity for all girls to the extent of their capacities. (On the contrary, there are other educators who seem undisturbed by the problem of adjusting education to the existing labor system. These writers, of whom Dr. Snedden is an able spokesman, are interested primarily in the question of fitting young persons for “vocational efficiency.” Employers desire habits of industry, application, thrift, orderliness, and speed; therefore vocational education must keep constantly before it the inculcation of these habits. It will be seen that, in the judgment of this educator, the present needs of industry must pretty effectually determine the character of vocational training.

“Vocational education” [declares Dr. Snedden,] “must find its point of departure primarily in the various divisions of the active world of productive effort—the occupations which men and women now follow. From these it must in each case work back and so elaborate the means and methods capable of producing a fairly high and enduring type of vocational efficiency. The final test of vocational education is the degree to which it is able to connect itself with right standards of efficiency in the economic world.”¹

Using “present experience” as a touchstone, Dr. Snedden attacks the question of what is to be done with the boy and girl in the years between fourteen and sixteen. To him it appears “not only economically but educationally important that shortly after fourteen they should find themselves in an atmosphere of productive work, whether that be in a vocational school or in actual employment. . . . It is entirely possible that experience will show that the most profit-

¹ Snedden, *Educational Readjustment*, p. 188.

able vocational education can be accomplished by taking the boys or girls during these years and giving them quite specific training for some definite occupation. . . .” It is true that certain idealistic persons still believe that the years between fourteen and sixteen may be devoted to an education at least in part liberalizing, but in the author’s opinion this anticipates a time when “the economic necessity for early employment will not be so pressing as at present.”¹

Dr. Snedden then goes on to describe the kind of vocational school that will train for industrial efficiency as that is commonly understood. To be anything more than a sham such a school must reproduce as far as possible the actual conditions of the factory. “Shop hours, shop clothing, and provision that a considerable part of the product shall be capable of being marketed” should be insisted upon. The advisory committee of the school, as well as the teachers, should be selected from persons concerned with or trained in the industry. Not much attention should be given to related general and technical studies in the initial stages of work, but on the contrary, a “fairly sharp break with the methods and traditions of academic training” should be made. Indeed it is probably desirable that the girl or boy should devote the first few months of attendance in an industrial school to “mastering the elementary conditions of productive work,” spending to that end, “the full working day in the workshop under shop conditions. . . .” After these months of concentrated experience, during which skill and practical knowledge have been developed, those studies, such as drawing and mathematics,

¹ *Ibid.*, pp. 197-98.

“which have a distinct bearing on the vocation for which training is being had, and which are closely related to the projects already worked out” may be begun.¹

But where does this scheme provide for general education—education in the art of living wisely, fully and happily? The author replies: Rate of output, attention to detail, and salability of product “must be the standards held before the pupils if educators would avoid trifling, dilettanteism, and formation of bad habits.” These aims being held uppermost, place may be found for “some general education” so organized as not to interfere with the systematic vocational work. Such studies should “be arranged to fall outside the regular working hours, in the afternoon or evening.” If time be taken out of the working day for education in general subjects such an arrangement would have an “injurious reaction” upon vocational training, for the reason that in real life “the vocation must claim these hours of the individual’s time when the working energies are at their maximum strength.” Like Herbert Spencer, Dr. Snedden holds that leisure hours can best be devoted to cultural purposes. To this end children may be encouraged to form literary and musical clubs to meet in the evening. The program of the vocational school itself is sacrosanct, being dedicated to an approximation of “the program of action to be called for by the working world.”²

In commenting on this scheme it may be said that it requires no great perspicuity on the part of the

¹ *Ibid.*, pp. 200-205.

² *Ibid.*, pp. 190-92.

reader to perceive that Dr. Snedden ignores a serious obstacle to the realization of his plan, namely, how young people who have spent eight hours in strenuous work under shop conditions are to be induced to attend classes and clubs for cultural purposes. Also open to question are the two ideas most prominent in this educational scheme; first, that vocational schools must reproduce as closely as possible the *existing* conditions of industry, so far as hours, dress, speed, accuracy, and routine work are concerned; secondly, that liberal education must be sharply divorced from vocational training save as mathematics and drawing are closely related to mechanical projects. In regard to the first point it may be accepted as certain that at least a few far-sighted individuals will object to whole-hearted acceptance of the present system of industry as the starting point of a plan for vocational education. More clearly than most educators has Professor Dewey seen the social implications of such a program:

“Any scheme for vocational education which takes its point of departure from the industrial régime that now exists, is likely to assume and to perpetuate its divisions and weaknesses, and thus to become an instrument in accomplishing the feudal dogma of social predestination. Those who are in a position to make their wishes good, will demand a liberal, a cultural occupation, and one which fits for directive power the youth in whom they are directly interested. To split the system, and give to others, less fortunately situated, an education conceived mainly as specific trade preparation, is to treat the schools as an agency for transferring the older division of labor and leisure, culture and service, mind and body, directed and directive class, into a society nominally democratic.”¹

To the writer this objection seems insuperable. Nor is it adequately met by the provision that children in

¹ *Democracy and Education*, p. 372

industry may be encouraged to form musical and literary clubs out of working hours. Is it at all probable that a girl of fourteen, passing from the elementary school to a vocational school which closely reproduces shop conditions, will have had opportunity to develop taste for good music, literature, art, science or drama, strong enough to impel her to carry on any one of these liberalizing pursuits during the few hours when she is set free from wearisome and "soul deadening" tasks?

This points to the fundamental defect of most schemes of vocational training: they overlook the fact that every individual has more than one vocation. In its generic sense, of course, a vocation is a *calling*, a continuity of meaningful activities organized around some one phase of life. Professor Dewey has clearly expressed this idea:

· "In the first place each individual has of necessity a variety of callings, in each of which he should be intelligently effective; . . . No one is just an artist and nothing else, and in so far as one approximates that condition he is so much the less developed human being; he is a kind of monstrosity. He must, at some period, of his life, be a member of a family; he must have friends and companions; he must either support himself or be supported by others, and thus he has a business career. He is a member of some organized political unit, and so on."¹

It is not too much to say that no vocational education can meet the needs of a democratic society which ignores or minimizes the basic fact that no human being is merely a worker for a living. Even if we grant, as we must, that earning a livelihood is one of the most important and time-consuming of the vocations, we still are not obliged to regard preparation for that

¹ *Op. cit.*, p. 359.

calling solely from the narrow viewpoint of the requirements of industry to-day. The issue seems clearly defined. Either we approach the whole diversified problem of vocational education from the vantage point of the spiritual needs of a highly developed, humane society and of the individual as a free member of that society, or we approach it from the angle of the needs of "those who are intrenched in command of industrial machinery."

If the former point of view be accepted, vocational schools must acknowledge "the full intellectual and social meaning of a vocation." This would signify, on the side of subject-matter, that the students be led to appreciate the historic evolution of industry, the part that science has played in its development, the services art has rendered to it, and the economic problems involved in the contemporary industrial situation. On the side of individual mental growth it would mean the painstaking development of those intellectual qualities of imagination, inventiveness and initiative, together with the power to meet changing conditions with intelligent foresight, which, when accompanied by social good-will, are the most precious assets of a progressive democracy. Such vocational education, of girls as well as boys, would insure the humanizing of industry and, therefore, the ultimate betterment of society as a whole.

Intelligence and Vocational Efficiency: An Experiment.—It hardly needs to be said that little has been done in the way of providing such education for boys and girls. A significant experiment, however, has been made by Mr. Robert Wolf, manager of certain large paper manufactories. Mr. Wolf came to the con-

clusion that the quality of the paper manufactured in his mills was inferior to foreign makes largely because of the failure to solve the problem of the best length of time to subject the paper pulp to low pressure in the "wet machines." Having discovered that three minutes of low pressure gave the best results, the management designed an instrument which recorded the number of minutes low pressure was kept on, as well as the time lost between low and high pressure operations. The record of each workman was posted in the hope of stimulating competition in efficiency. After a record of operations had been kept for some time, it was discovered that the men were working at an average efficiency of 42 per cent. Mr. Wolf realized that the low efficiency of the men operating the machines was due to a lack of interest in and understanding of the experiment and of the processes involved in working it out. He therefore evolved the plan of having the foreman explain in detail to each man what the recording machine meant and how the men's efficiencies were obtained. Moreover he put the recording instrument into a glass case, in the machine room, where all the men could easily observe its workings.

As soon as the operatives had grasped the full meaning of the experiment, as soon as their intelligent interest had been enlisted in its success, their efficiency rose to 80 per cent. in less than four weeks, and it never fell below that high average during a period of three or four years.

As a result of his experiment Mr. Wolf has become a convinced believer in the theory that 80 per cent. of the work in even highly mechanized industries could

be made interesting to the workers if the plan were explained to them. He has himself seen men in specialized factory labor get together and work out the problem of getting rid of one or more mechanical processes by combinations and mechanical changes. This and similar experiences have made of him an advocate of the doctrine that *the man who functions consciously, who controls his material by the conscious exercise of his mental capacities, is an asset to industry through the release of his creative power.*

The Creative Impulse in Industry.—It will doubtless occur to readers of this experiment that, after all, it does not go very far in stimulating the mental abilities of the workers; nor is the scheme designed *primarily* to educate their capacities for creative work, but rather to increase their efficiency. A more thoroughgoing plan for the vocational education of girls and boys is that suggested in Miss Helen Marot's thoughtful book, *The Creative Impulse in Industry*. Unlike those critics of our mechanized industries who see in them no possibilities for the educational development of the worker, Miss Marot courageously declares that "in machine production and in the division of labor there are emotional and intellectual possibilities which were non-existent in the earlier and simpler methods of production." It is true that "this technological subject-matter, rich in opportunities for associated adventure and infinite discovery, is not a part of common experience. . . ." Nevertheless it exists and furnishes "fit matter for making science a vital experience in the life of the worker." But such a desirable outcome, implying as it does the *education of the worker through his work*, can only be accom-

plished by a more democratic administration of industry. And the reason is plain:

"A democracy of industry," [says Miss Marot,] "requires a people's sustained interest in the productive enterprise; their interest in the development of technology, the development of markets, and the release of man's productive energy."¹

Doubtless to some persons this will represent one more Utopian dream less realizable than most—and less desirable. But how does the author work out in practicable form the problem of a vocational school which shall realize these ends? Far from accepting as satisfactory the present trade and part-time schools in this country, Miss Marot characterizes them as "makeshift attempts." She suggests that it would be well to undertake experiments designed to "stimulate the impulses of youth for creative experience" by giving them "an industrial experience where the motive of exploitation is absent" and the motive of interest in work is uppermost. To this end she would have workshops established in connection with schools and designed for the production of some marketable article. These shops should be independently financed not on a basis of profits, although the capital invested in them might draw a legal rate of interest. Accepting the principle emphasized by Dr. Snedden and others that the work should be organized on a basis of productive efficiency, thus eliminating dilettanteism, the author advocates putting the enterprise under the direction of managers competent in technological processes. The working force would consist of those boys and girls who had received both elementary school certifi-

¹ *Op. cit.*, pp. 25-6 (ed. 1918).

cates and employment certificates. This force should be supplemented by a certain number of adult workers necessary for the successful conduct of the plant. As the younger employees would work in alternate shifts in the shop and in the school they would be paid on a half-time basis although at market rates. The exchange of shifts might be made daily, semi-weekly, or weekly as seemed most "conducive to the health and the intellectual experience of the children and to the needs of production in the organization of the shop."¹

Having sketched the outlines of her plan of organization of workshop-schools, Miss Marot next attacks the crucial question of the part which technical processes shall play in the education of the young workers. To her mind the acquisition of technique is only one factor, *and that not the primary one*, in the present-day system of production. The educational value of technical processes lies in the fact that they afford necessary experience for the understanding and evaluation of workmanship. Even so they contain only a fraction of the educative material which workers should acquire if they are to be industrially intelligent. An exclusive emphasis upon this factor would mean that our boys and girls would merely be equipped "to act as factory attachments." Because educators "have fostered the illusion that the educational subject matter of industry was inherent in the technical process of fabrication" they "have missed the educational principle applicable to the craft period, as well as to the present, that *the condition of the educational requirement is that the workers' participation in pro-*

¹ *Op. cit.*, pp. 11-12.

ductive enterprise coincide in the long run with creative intention and accomplishment.”¹

This last statement embodies the kernel of Miss Marot’s philosophy. Because she believes that the fundamental requirement of all industrial education is that young people “learn to function with conscious creative intention in the environment in which they live,” she would have them engage not alone in the mechanical processes of an industry but in those other more educative and stimulating activities concerned with purchase of raw materials, the relation of mechanical equipment, labor, and raw material to the finished product, the securing of markets and the extension of the services of the plant.

Fortunately enough, the author is not content with generalities. On the contrary she selects an industry—that of the manufacture of wooden toys—and shows how a two years’ course might be given in which workshop and school should coöperate in giving an all-round industrial education to girls and boys. Although wooden toy manufacturing was the industry chosen, Miss Marot declares with conviction that any other of the many occupations classed as unskilled would serve as well to illustrate her thesis—always with the proviso that the industry were chosen because it afforded “an experience where the enterprise of production was opened up and the possibilities of creative life were realized in association with others, so far as the conditions and time allowed.”²

The wooden toy industry was selected as an example because it has educational value for the workers,

¹ *Creative Impulse in Industry*, pp. 113-14. Italicics mine.

² *Ibid.*, pp. 114-15.

because its product meets a social demand and therefore has marketable value and, finally, because such an experiment in industrial education has been actually attempted. The details of the plan call for a toyshop with a working staff of forty young people, twenty in the shop and twenty in the school at any one time. The best standards in use will be held up to the workers but their attention will be called to the desirability of improving those standards, on the theory that an important source for these improvements is the workers themselves. At this point Miss Marot should speak for herself:

"The workers may acquire the technique of all or of several processes. Their general facility in technique may contribute to their productive value in the shop or their mastery over several processes may have its educational value for them in relation to the industry as a whole; they may to advantage shift from one process to another to relieve the strain of routine work. . . . But the workers will not be shifted from one construction process to another for the sake of learning all the processes, because skill in all the processes is not a requisite either of education or of production. The experience in the shipping of goods and in the handling of raw materials, in the installation of power, in the upkeep of the equipment and the general care of the factory will be participated in by all the workers in their turn, according to the requirements of the industry."¹

Here, then, is a complete repudiation on the one hand of the theory that, in the present conditions of industry, the merely technical tasks must of necessity be turned over to a body of unskilled workers; and, on the other hand, that industrial schools must seek their educational subject-matter solely within these highly specialized processes. On the contrary Miss

¹ *Ibid.*, pp. 119-20

Marot daringly advocates such an organization of the workshop as shall make possible a varied and broadly educative experience for the young apprentices in every phase of the industry from the technical process to the shipping of the product.

The school plays its part as "the workshop laboratory where problems which originate in the shop can be taken over for analysis and solution. These concrete shop problems will represent required school subjects, as the progress of the shop and the success of the enterprise depend upon their solution." The subjects discussed by the author are condensed as follows:

- (1) The technical problems of manufacture, such as receiving and storing stock, planning operation, and routine work.
- (2) Keeping the financial accounts and estimating costs.
- (3) Upkeep of the working force, buildings and equipment; for example, "the valuation for each worker of his own physical condition and expert advice in regard to nutrition and other physical needs.
- (4) The economies of the enterprise; for example, "the market of the raw material—the study of the market in relation to grades, to cost, to transportation, to quantity in cost of purchases, to time of purchase."
- (5) Art and service. While the shop will welcome models from the pupils it will be recognized that they have had little art experience while "there is a world of designers from which to draw." There will be a jury "composed of the workers in the shop, an artist, and one or two people who have given the subject of toys careful attention." This jury will pass upon the artistic value of models presented.
- (6) Literature and history. "Authentic accounts and inspirational stories of industrial life, especially of lumber, the wood-working, and the toy industry will be gathered by the pupils and the teachers." The literary productions of the children on these themes "will not be called

for as exercises in the art of writing or of fact-recording but as contributions toward the equipment of the school. The books which are collected as well as the original compositions will be submitted to critical analysis and accepted as accessories to the library if they come up to standards in authenticity and in literature.”¹

In advocating that experiments similar to the above be tried out, Miss Marot throws squarely on the shoulders of educators the responsibility for determining whether the modern system of industry is in reality antagonistic to the mental development of the workers. “Without question, it is the business of educators to determine whether such features of industry as machinery and the division of labor are fundamentally opposed to growth or whether they are opposed only in the way in which they have been put to use and directed.” Miss Marot herself believes that, because “the mechanics of associated effort in industry” has been pretty fully worked out, it is possible for our young workers to-day to associate in a creative project and to experience the joy of creative effort “in the planning of the work along with the labor of fabrication.”²

The Education of Working Girls for Home-Making.—Doubtless a girl who had spent two years in a school such as Miss Marot describes could hardly have failed to gain insight into the methods by which industry is carried on, to build up some historical and literary associations with her field of work, to appreciate the relation of art to manufacture, and to understand the requirements of personal hygiene and proper nutrition. This is excellent, as far as it goes; but

¹ *Ibid.*, pp. 121-26.

² *Ibid.*, pp. 185-87.

there will doubtless be critics to point out that, after all, this girl will be something more than an individualistic worker. She will, in all probability, marry and become a housewife and mother, as well as a citizen. And this leads us to one of the conspicuous problems in the education of working girls: How can these girls be educated for a dual vocation—that of homemaker on the one hand and of skilled worker on the other?

The case of girls in industry presents a somewhat different aspect from that revealed by their sisters in the professions and highly skilled vocations. In the first place a far higher proportion of working girls will marry than of college women. Social statistics make this abundantly clear. In the second place, working girls cannot hope at present to earn incomes commensurate with those of professional women, although the disparity in earning power of the two groups shows some tendency to lessen. Obviously these two facts put together mean, at first glance, that most young women in industry will be compelled to perform their own household tasks and care for their own children, since they will not be able to hire adequate help. Is it advisable, then, to ignore the education of working girls for the vocation of home-making?

On this question, as on every other problem in the education of women, there are two sharply contrasted points of view. Probably the majority of educators, both men and women, will be found aligned solidly in favor of training girls for a dual sphere. This group emphasizes the fact that large numbers of working women engage in household tasks after their day's work is done and need intelligent training in the per-

formance of those tasks. In this connection the following statements made by Puffer¹ are of interest:

"Moreover, of every hundred American girls between school and marriage, fifty are either assisting their mothers in their own homes, making homes for their relatives, or working for wages under some other home-maker. Even of the fifty that remain, who at first glance might be counted as being outside the home, more than thirty are living under their parents' roofs or in the homes of relatives. . . . Virtually all women . . . will at some time in their lives either make homes for themselves or else take a hand with helping other women make theirs, while at least half will do both. The chance, therefore, that any individual school girl will follow home-making as her chief vocation in life is distinctly greater than that any school boy of corresponding age will follow the particular career on which he has set his mind. This is the one great central fact which confronts the vocational guide who deals with girls."

These are facts that cannot be ignored. They have led educators to advocate not only courses in home-making in the upper grades of every elementary school but also the inclusion of household arts in the scheme of industrial education. When, however, the practical question of incorporating home-making courses into trade and vocational schools is attacked, difficulties at once appear. The intensive training offered in many trade schools, such as the Manhattan Trade School in New York City, affords little opportunity for giving girls anything more than a rather superficial acquaintance with the problems of domestic economy in its many aspects. Even so cordial a believer in domestic training as Mrs. Woolman is forced to admit that, although the idea of woman as a home-maker should be ever present in training teachers of industry, "it cannot be emphasized in the short-time

¹ *Vocational Guidance* (1913) pp. 145-6, 148. Reprinted by permission of Rand McNally and Company, publishers.

trade school of industrial cities as it can in vocational schools in other localities."

The disadvantages which result from training working girls for the two vocations of industry and home-making in our industrial schools have been vigorously discussed by a small group of writers familiar with the practical problem of vocational training. Out of a long experience with working girls, gained as an officer in the National Women's Trade Union League, Mrs. Raymond Robins writes with conviction on this subject:

"One of the great difficulties which a young girl has to face in industrial education is this: we women are asked to play a double part. We function in two very different ways. In one as a bread-winner for, on the average, seven years, and then as a wife and mother. So strong is the feeling with us in America that the young girl is potentially the wife and mother, and that her training as such must overbalance all other training, that we still have a good deal of confusion on the subject of industrial education for girls. The average man or woman asks that our young women be trained primarily in all that pertains to household art, in all that pertains to developing the girls' possibilities and skill to be used in later life as wife and mother. . . . This brings about some very dangerous results in the trade schools for boys and girls. Let me give you an illustration. There is an agricultural school in one of our Eastern cities, where the girls and boys are taught the possibilities of bread-winning as agricultural laborers, agriculturists, gardeners, florists, or what ever you will. When it comes to the boy, he learns the chemistry of the soil, and gets down to fundamental things in those particulars, but the girl is taught cooking and sewing. I am not saying that cooking and sewing are not necessary, but when we cheat a girl out of the training she ought to have for her bread-winning capacity, and substitute something which has nothing to do with the trade she is trying to learn, then we make a great and grave mistake."¹

¹ "Industrial Education for Women," in *Proceedings of the National Society for the Promotion of Industrial Education*, Bulletin No. 10, p. 78.

Quite as emphatic is Miss Florence Marshall, Principal of the Manhattan Trade School for Girls:

"We have idealized about girls too long. We have many cherished notions about what they ought to do and be. We should like so much to see them taught a little domestic science and art, hygiene and home nursing, and a few other things, and then see them comfortably settled in homes of their own away from all perplexing problems which our industrial life presents. When, however, we discover that in some of our cities 77 out of every 100 girls (16 to 20) are working for pay outside of the home; . . . then we realize that we are confronted with a condition and not a theory—a condition which demands an intensely practical treatment. We realize that to achieve our ideals we cannot afford to be doctrinaires who refuse to allow our theories to associate with conflicting facts; that we must not be like the Reverend Amos Barton 'whose plans were admirably conceived had the state of the case been otherwise,' but, accepting the fact that under present conditions girls are and must be wage earners, must we not insist that they be trained for wage-earning occupations, which means growth and not stagnation?"¹

Recognizing the difficulty of training working girls for two vocations in schools designed to train them for industry, Dr. Snedden holds that schools should be established in every locality to afford young women from eighteen to twenty-five who have been employed in stores and factories a practical, intensive education in home-making at the time when they most need it. Obviously such practical training would benefit by all the impulsive force which springs from real motivation and interest. Suggestions for working out such a plan are offered by the rural home economics schools in Denmark. Before their establishment it was customary to send betrothed girls living in the rural districts to some prosperous, well-managed home where

¹ "How to Conduct a Trade School for Girls," in *Proceedings of the National Society for the Promotion of Industrial Education*, Bulletin No. 9, p. 100.

they could get a year's apprenticeship in the practical tasks of housekeeping. Since the organization of household arts schools, however, young women about to be married have attended these schools in large numbers to obtain an intensive practical training combined with much sound theory. Foght thus describes these schools:

"The young women are expected to reside at the school during their continuance therein. The courses are usually six months in length. . . . The buildings are equipped with model kitchen, dining-room, living-room, and bedrooms, all of them intended as models for practical farm homes."¹

Obviously it would not be possible to establish similar residential schools in the crowded industrial centers of the United States. But would it not be practicable to set up public day-schools of household arts to which young working women could resort before or after marriage for the skill and knowledge necessary for successful home-making? Such schools might well offer general courses to both men and women treating of the basic functions of the family institution in social life, the numberless points at which the home touches that life for good or ill, and the influences at work to-day to disintegrate it. Both sexes could profit from practical education in budget-making, in household sanitation, in an intelligent selection of foods, clothing, and house-furnishings such as would increase the well-being of their families and enhance the beauty of life.

By the organization of public schools of household arts, distinct from trade or industrial schools, the

¹ "Education in Denmark," in Sandiford, *Comparative Education*, pp. 492-93. By permission of the author.

demand of society that young women be fitted for home-making as an important vocation of life would be met. At the same time girls would not suffer, in their education for wage-earning, by being compelled to divide their energies and time between two vocations. It seems reasonably certain that an ever-swelling stream of women, married as well as single, will take up gainful employments outside the home. The statement of Mr. Puffer that "the relations of men, women, and work have now virtually completed their adjustment . . ." is absurd upon its face. As stated above, the number of women in gainful occupations has steadily increased during the last three decades.¹ Even ten years ago the census figures showed that 25.4 per cent. of this army of women workers was composed of married women. The corresponding figures in the forthcoming census of 1920 will reveal how far this country has gone in the direction of making its women, both married and single, independent wage-earners.

The Wage-Earning Life of Women.—It may be objected at this point that even if young women do take up gainful employments they drop these after a few years to marry and make a home. Therefore why spend time in training them? The writer's studies have led her seriously to question the popularly accepted theory that the wage-earning life of women is only from five to seven years in length. A recent investigation made by the Division of Education of the Russell Sage Foundation throws considerable doubt on this assumption. The investigators sought to discover the ages of women gainfully employed in cities of 50,000 and over with a view to determining how

¹ *Life and Labor*, Nov., 1919, p. 106.

many years they had been wage-earners. They selected only those occupations in which women were employed in a ratio exceeding one for every one thousand of the population. With these limitations the number of women included in the study was 857,743. The occupations chosen were teacher, laundress, housekeeper, nursemaid, saleswoman, dressmaker, and domestic servant. Leake summarizes the results as follows: "More than half of those engaged in each occupation were over the following ages: housekeepers, forty; nursemaids, thirty-six; laundresses, thirty-four; sales-women, twenty-three; teachers, thirty-two; dress-makers, thirty-one; and servants, thirty-seven." Leake adds the comment that "it is fairly safe to assume that those who were working at the age of forty, thirty, and, in the majority of cases, at twenty-five had been so engaged for more than seven years."¹

In view of the facts revealed by this investigation and other social studies, it would seem the part of wisdom to accept a situation in which millions of girls and women are employed in gainful occupations for varying periods of years and see to it that before entering upon their vocations they be given as thorough and all-round preparation for work as is given to their brothers. Training for a subsequent vocation as home-makers should unquestionably be furnished such women as need it in special schools maintained by public funds. In the years to come it is conceivable that schools of this nature might be restricted to the task of training women in household arts as a profession, although no confident prophecy can be made on this matter. It was stated in a previous chapter that there

¹ *The Vocational Education of Girls and Women*, pp. 6-7.

has been in European countries, especially in England, a rather promising development of municipal or national kitchens. These kitchens, established in Great Britain purely as a war emergency measure, are rapidly becoming a recognized part of the social organization of the country. They provide nutritious and well-cooked food at the lowest prices consistent with self-support (not profit) and represent an enormous economy of labor by the collective preparation of food. National kitchens serve the needs of all classes, from the well-to-do to the very poor, and are in no sense a charitable enterprise. So valuable have they proven that, on the petition of a local council, the British Government will advance, free of interest, the whole capital cost of establishing the kitchen. The sole condition is that the loan be repaid in ten equal installments. In December, 1918, about 1,000 of these kitchens had been set up all over the country. To each kitchen is attached a restaurant. Here families may come for a cheap and appetizing meal; or the food may be taken home to be eaten at the family table. Writing on the social benefits conferred by these kitchens an English-woman says:

"If a woman is a breadwinner, in factory, or workshop, the national kitchen is a special boon. She can turn in there at midday, or if that is impossible she can arrange with a kindly neighbor to bring the food to her home; and there, when she comes back tired in the evening, she can warm it quickly and so be saved all the preliminary worry of planning and cooking."

Likewise the busy mother can bring her children with her

"and in new surroundings away from the atmosphere in which she works—in itself a boon, and one which well-to-do folk are apt to

overlook, since they never have to consider it—sit down in peace and quiet and enjoy a good meal.”¹

To those critics who will doubtless attack this scheme on the ground that “it will destroy the home” it may be said by way of encouragement that the individualistic tendencies of the American people have thus far successfully resisted most movements looking toward coöperation in the organization of essential life activities. Nevertheless, if girls and women continue to crowd into industry and to desert domestic service, and if the tendency for women to remain at work after marriage gains strong headway, we may yet see the labor of thousands of individual homes professionalized and carried on by intelligent collective effort.

¹ Priscilla Moulder, “Why National Kitchens Have Come to Stay,” in *Life and Labor*, Dec., 1919, pp. 316-19.

SELECTED READINGS

BLOOMFIELD, MEYER, "Readings in Vocational Guidance." See especially pp. 220-33, 454-484, 542-56, 571-601.

BREWER, JOHN M., "The Vocational Guidance Movement." See especially Ch. VI.

GREENER, G. C., "Prevocational Training for Girls as conducted by the North Bennett Street Industrial School, Boston," *Industrial Arts Magazine*, by H. A. May and June, 1918.

KINGSBURY, DR. SUSAN M., "A Trade School for Girls," *U. S. Bureau of Education Bulletin*, No. 17. 1913.

LEAKE, ALBERT H., "The Vocational Education of Girls and Women," Chs. VIII, IX. 1918.

MAROT, HELEN, "Creative Impulse in Industry." . . . Especially pp. 92-146. 1918.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION:

1. BAYLOR, "Trade and Industrial Work for Girls." Bull. No. 24, 1917.
2. MARSHALL, FLORENCE, "How to Conduct a Trade School for Girls." Bull. No. 9, pp. 90-100.
3. ROBINS, MRS. RAYMOND, "Industrial Education for Women." Bull. No. 10, pp. 77-81.

ODENCRANTZ, LOUISE C., "Placement Work for Women and Girls in New York City," *Manual Training and Vocational Guidance*, pp. 169-77. Nov., 1915.

SNEDDEN, DAVID, "Problems of Educational Readjustment," pp. 183-232 and Ch. V. 1913.

STODDARD, ABBIE O. and CHAPMAN, LUCY H., "What Should Vocational Schools Offer Girls?" *Education*, Vol. 37: 244-51.

"Vocational Guidance in New York City," *Outlook*, February 26, 1919.

CHAPTER VII

THE SOCIAL EDUCATION OF WOMEN

The Need of Society for Socially Trained Women.—In the face of the unsettled social conditions now prevailing in all civilized lands and of the bitter enmities and disruptive forces bred by the World War, there are not lacking discerning souls who maintain that the primary function of schools and colleges to-day is the socialization of the girls and boys, the young men and women of the nation upon whose shoulders will shortly fall the responsibilities of active citizenship. By “socialization” these individuals mean:

First, the education of youth in enlightened understanding of existing social conditions and needs as these have evolved from the economic and social circumstances of the past.

Secondly, the development of a spirit of active friendliness and good-will toward all men, as individuals and as members of organized groups and nations.

Thirdly, the training of boys and girls in habits of social action to further desirable social ends.

To these aims of “socialized” education in the larger community sense of the word should be added more personal aims—the development in young women of a fine consideration and courtesy in the social relations of life which is the expression of a sincere regard for the peace of mind and happiness of their fellow beings. Such regard for others should coexist with a respect for one’s own “best self” and a firm

desire to regulate one's social conduct by an intelligent comprehension of its social consequences.

Perhaps few educators would disagree, in theory, with these propositions. But such agreement would not necessarily do away with an existing obstacle to the realization of the ends they set forth. This obstacle is unquestionably the rooted tendency of teachers, particularly in high schools and colleges, to appeal exclusively to the intellect of their students, to regard their task as primarily the enlargement of the students' store of information and the development of their power to think and judge in some one of the theoretical fields of knowledge. This historic weakness of the teachers in our higher schools is of course no secret. It has frequently been satirized by the practical minded and criticized by educational philosophers—with but meagre results. Engrossment in the purely theoretical and factual phases of their subject causes these well-meaning intellectualists blandly to ignore the fact that their students are living in a world that demands social enlightenment and habits of social co-operation even more insistently than it demands knowledge of higher mathematics and modern languages. The melancholy harvest of this "academic" sowing is everywhere apparent. Thousands of young women are graduated every year from school and college with at best only a feeble interest in community and national affairs—an interest which contrasts glaringly with an almost feverish concern for the allurements of the ball-room, the motor car, and the "movies." This result is the more deplorable when one considers the urgent need of society for wise leadership in this time of far-reaching changes in social and economic condi-

tions. On every side is heard the call for educated men and women with social outlook and capacity to organize and initiate. During the World War this need was expressed by the Commissioner of Education in a letter to high school principals:

“When the war is over there will be made upon us such demands for men and women of knowledge and training as have never before come to any country. . . . The world will have to be rebuilt, and American college men and women must assume a large part of the task. . . . To you comes that call clear and strong as it has seldom come to young men and women anywhere in the world at any time. For your country and for the world—for the immediate and the far-reaching future you should respond.”

In a peculiar sense the girls and women of to-day are in need of a broader social training to combat age-old individualistic attitudes and habits. Doubtless the student of the historic evolution of the life of women has ample cause for encouragement. The signs that women are abandoning the social isolation enforced by a restricted domestic life are many and various; and there is every reason to believe that the extension of the franchise to women will prove an unequalled means of social education to them as it has to many of their brothers. Nevertheless it would require a somewhat blind optimism to believe that women as a whole are as actively interested in public issues as are men (however deficient the latter may be in this regard), or that women have a highly developed sense of responsibility for the removal of those conditions of maladjustment that breed friction and discontent in the social body. It is not surprising that women in general are more individualistic than men, more given to limiting their social interests and activities to the sphere of

personal contacts. Their induction into the bustling world of industry, of social movements, and of political activity is still too recent and too partial to have accomplished all that may be hoped for in the years ahead. Nevertheless, the call to work for the public good comes to women no less insistently than to men. When a young college woman, holding an important post in Paris during the late war, was asked what special message she would send back to her American sisters if she could send but one, she promptly replied: "Tell them there is no limit to what they can do. But they've got to get ready for what's ahead. They must be training now, to be ready when the time comes."

In a recent article in the *Teachers College Record*, Professor Ellwood vigorously expresses himself on the question of the vital importance of the social studies in education:

"Most [educators] would probably agree also with the inference that the school should reproduce in miniature—though in a selected, simplified, and controlled manner—the social activities of the community. Many, however, still seem to shrink from the conclusion that social studies should be made central in the curriculum of the school; that good citizenship implies social intelligence and that social intelligence is impossible in our complex modern world without knowledge of concrete social conditions and problems. Yet, it is clear that in a democracy this is what the taking of the social process as the 'pattern' of the educative process implies. For in a democracy the people must solve their own problems and the opinion and will of every individual count in determining the wisdom or unwisdom which shall be shown in their solution. . . . The greatest foe of democracy, it follows, is ignorance, especially social and political ignorance; and the chief concern of democracy is education, not in the sense of individualistic culture, but in the sense of social education. That this is more or less clearly realized in all democratic societies is shown by the attention given it by the press, the public

assembly, and other agencies of popular enlightenment. The schools, however, must obviously be the main reliance in a democracy for securing social and political intelligence. It is surely time that they be democratized, but no one can seriously claim that they are democratized, until they undertake the democratic social process of awakening and informing citizens about the problems of the community and of leading them to aid in their solution. This means that social studies, studies which deal with the problems of community life, must be made central in the educative process of our schools from the kindergarten up, just as the consideration of social problems is central in the democratic social sense. Linguistic, intellectual, and vocational training are, of course, necessary auxiliaries, but as good citizenship in the sense in which we have defined it is the end, there can be no doubt that social studies are central in a democratized education.”¹

If it be admitted that no system of education can meet the needs of a progressive democracy which does not set as its controlling purpose the socialization of young people, deliberately subordinating the aims of development of knowledge, thought-power, æsthetic appreciation, and skill to that supreme end, the path is cleared for the consideration of certain practical questions: (1) What is being done in high schools and colleges to develop social attitudes and habits? (2) What difficulties stand in the way of a broader social education of young women? (3) What remains to be done to attain the end more fully?

SOCIAL EDUCATION IN UNIVERSITIES AND COLLEGES FOR WOMEN

The Course of Study.—The question of what is actually being done in colleges to further the social education of women falls under two heads: (1) what is

¹ Ellwood, “The Educative Nature of the Social Process,” *Teachers College Record*, May, 1921, pp. 231-2. *Italics mine.*

being done by way of the course of study and class-room work, (2) by way of extra-curricular activities? During the last twenty years the enrichment of the traditional liberal arts course by the addition of the social sciences has been a marked tendency in higher education. An examination of the catalogues of women's colleges and state universities alike reveals a rich and varied offering of courses in economics and sociology. These range from introductory general courses in these fields to more specialized courses in Public Utilities, Corporations, Railroads, Taxation, The Modern Labor Movement, Socialism and Social Reform, the Social Treatment of Dependents, Immigration, Methods of Social Research, and Statistics applied to social and economic data. None of the women's colleges examined offers less than eight courses in economics and sociology, while Wellesley and Smith each offer twenty courses in these fields. Richest of all are the offerings in certain of the great state universities of the Middle West, notably the University of Minnesota with twenty-eight courses, and the University of Michigan with at least forty courses, exclusive of business finance and accounting.

Significant of the quickened interest of intelligent people in social and economic problems and the methods of their attack is the organization of the Carola Woerishoffer Graduate Department of Social Economy and Social Research at Bryn Mawr. True to the firmly established policy of the eastern women's colleges that all preparation for a life career be strictly separated from undergraduate work and relegated to the field of graduate study, Bryn Mawr's excellent Department of Social Economy is restricted to stu-

dents holding the bachelor's degree. Thus it is possible for large numbers of young women to be graduated from Bryn Mawr, as from other women's colleges, with but a slender equipment for understanding the complicated social and economic issues of the day and with scant experience in social coöperation. During the World War, Smith College likewise organized a summer training course in Psychiatric Social Work which developed into the Smith College Training School for Social Work. The *Smith College Bulletin* for 1919-1920 states:

"The success of this school, together with the perplexities of social reconstruction on a vast scale, suddenly thrust upon us, have been responsible for the development of the present school, with training courses for Psychiatric Social Work, Medical Social Work, and Community Service, and with a summer course of specialized character in Child Welfare."

It seems regrettable that these courses, including both theoretical and practical work, are open only "to graduates of colleges of approved standing and to a few exceptional persons of equivalent preparation." Thus the undergraduate at Smith cannot benefit by the excellent training in community service that is afforded.

The Neglect of Practice.—It is interesting to note that very few of the undergraduate courses in the social sciences given in the women's colleges and in some coeducational institutions combine study of social theories with practical social work. Indeed the writer clearly recalls the remarks of the head of the department of sociology in an eastern college for women to the effect that undergraduate study in this field should be sharply separated from practice. This professor

openly deplored the efforts made by a group of his students to link their study of sociology with social investigations and with the organization of working girls' clubs in the neighboring town. In the minds of advocates of "culture" the methods suitable to the development of undergraduates diverge widely from those that may properly be utilized in graduate professional study, where "theory and practice are deemed essential parts of one whole." It would seem that the psychological laws of learning which demand first-hand acquaintance with the facts and the problems of any field of knowledge, so far as this immediate experience is attainable, do not apply to the mental operations of the undergraduate mind. This mind, we are asked to believe, thrives best on abstract theory, on information detached from concrete experience. Eastern colleges for women, therefore, would definitely reject Dr. Cabot's statements about the learning process, so far as they applied to the young women of the undergraduate body:

"Learning medicine is not fundamentally different from learning anything else. If one had 100 hours in which to learn to ride a horse or speak in public, one might spend, perhaps, one hour (in divided doses) in being told how to do it, four hours in watching a teacher do it, and the remaining ninety-five hours in practice, at first with close supervision, later under general supervision."¹

It may be objected at this point that Dr. Cabot is discussing the learning process as it relates to a practical art like medicine or a skilled activity like horsemanship; that he has no idea of pointing his statements at purely theoretical learning such as is involved

¹ Quoted in Flexner, *Medical Education in the United States and Canada*, Carnegie Foundation for the Advancement of Teaching, Bulletin No. 4. New York, 1910.

in the study of economics and sociology. But it is precisely this insistence upon the abstract and generalized character of these studies and the unwillingness to discover how far textbook theories square with experience or can be put to social use that has resulted in the situation that confronts us to-day, where large numbers of college women are satisfied to stand aside and critically observe the epoch-making changes taking place in industry and social life with no definite purpose of bringing their own intelligence and good-will to bear upon these transitional forces in the hope of guiding them to socially useful outcomes. In brief, college education in the social sciences may be fairly indicted as producing too few women who are socially minded and who have formed habits of social coöperation and initiative. - Women like Jane Addams, Katherine Bement Davis, Julia Lathrop, Anna Howard Shaw, shine like beacon lights among the ever-growing body of liberally educated women who neither initiate social improvements nor lend effective help in carrying them out. During the fifty and more years in which women have been given opportunities for college education it would, perhaps, be possible to match every college graduate who became an outstanding figure in progressive social movements with one of her sisters like Susan B. Anthony, Lucretia Mott, Clara Barton, Mrs. Raymond Robins, and Rose Schneidermann who never received the benefits of college education. And yet the twentieth century ideal of culture demands not only broad knowledge and a well-trained mind but also requires that both knowledge and trained powers be put to work in socially useful ways.

Field Work in the State Universities.—The showing of the state universities with respect to practice and field work is, as might be expected of those more adaptable institutions, better than that of the women's colleges. Several universities offering a wide range of courses in economics and sociology combine field work with theoretical instruction. Outstanding among these universities is Minnesota, which has organized a training course in Social and Civic Work. This course has been established within the "College of Science, Literature, and the Arts" and covers both undergraduate and graduate work. According to the *Bulletin* issued by the University the "requirements for both entrance and graduation conform to those of the Arts College. Satisfactory completion of the four years' course leads to the degree of Bachelor of Science." A fifth year's work is offered which will satisfy both the requirements of the training course and the Graduate School and leads to a special certificate of proficiency in social and civic work, together with the degree of Master of Arts. The course aims to give the student "the fundamentals of a broad modern education with considerable emphasis upon history, economics, political science, psychology, and language." Specialized study with field work is reserved almost wholly for the senior year. While the undergraduate course "should confer upon the student a certain degree of familiarity with the problems of social and civic work" the university authorities declare that "really adequate professional preparation demands at least one year of graduate study."

Worth quoting in full is the statement of the *Bulletin* regarding the purpose of the course:

"This is distinctly a vocational course. Only those students therefore who display evidence of real capacity and the professional spirit will be encouraged to go on with graduate study. This does not mean that qualified students who have a special interest in certain courses are debarred; to the contrary they will be welcomed and every effort will be made to meet their specific needs. Nor does it mean that students who do not plan to earn their living by professional social work are to be denied entrance. *As a matter of fact, it is to be devoutly hoped that many students will elect the course as a training for effective citizenship and volunteer social work or as an adjunct to other vocations.*"¹

Here, then, is a college of science and arts courageous enough to offer a "distinctly vocational course" in the social sciences and enlightened enough to appreciate the need of "many students" for such a course as a means to worthy and effective citizenship. Moreover the university does not hesitate to combine practice with theory. In addition to the general courses in sociology, economics, social psychology, modern social reform movements, etc., there is introduced, as early as the junior year, a course in Housing Problems which involves field work and one on State Care of Dependents, Defectives, and Delinquents in Minnesota, during which addresses are given by experts from the institutions under consideration. It is in the senior year, however, that the emphasis on practical experience is strongest. Field-work and "practice work" are required in the following senior courses: Social Statistics and Social Surveys, Settlement and Community Center Work, Charitable Administration, Finance and Publicity, Juvenile Courts and Probation, Technique of Family Treatment and Field

¹ Italics mine.

Work in Hospital Social Service. If the student takes the recommended year of graduate study a very considerable part of his time "is devoted to supervised field work with selected social agencies and institutions in and around the Twin Cities. Moreover, every opportunity is taken to bring to the students specialists and experts from the various fields of social work, in order to build up the professional attitude and to establish professional contacts."¹

Likewise the University of Michigan offers undergraduate courses in sociology involving visits to institutions for defectives, delinquents, and criminals, as well as a direct examination of the modern methods for the care of dependent classes. Furthermore, the university catalogue states that credit will be given advanced students for field work done under the supervision of one of the Detroit social agencies. Its motive in so doing is clearly set forth: "The great demand at the present time for social workers with experience makes it of advantage to students, looking to social work as an occupation, to get as much practical experience as they can in connection with their class work in the University."

On the whole, then, it seems clear that certain state universities of the West are more hospitable than women's colleges to the notion that the social sciences do not suffer in cultural value when they are put to practical use, either in professional preparation for social work or as a training in effective and worthy citizenship. Who knows but that America in time may be won over to the ancient Greek ideal of civic worth as the controlling aim of education?

¹ *Bulletin*, p. 5.

Social Education through Extra-Curricular Activities: Findings of a Questionnaire.—When we turn to an examination of the extra-curricular activities carried on in universities and colleges educating women we are confronted by a bewildering variety of organizations. A few months ago the author sent out a questionnaire to more than one hundred of the leading colleges and universities of the country where women are admitted. The questions asked were as follows:

I. Is any deliberate effort made in your college (or university) to provide for the social education of young women?

II. Is there any organized plan for drawing retiring or self-centered girls into group relationships?

III. Are there organizations in your college (or university) whose purpose is to bring young women into contact with the problems and needs of the community and to furnish opportunities for active co-operation and service?

IV. Are there clubs for the political education of young women, including debating clubs on public questions?

V. What other means are employed to give young women social interests (in the larger community meaning) together with a sense of social responsibility?

VI. What opportunities for leadership are afforded young women in your college (or university)? What (estimated) proportion of the women students in the graduating class have had little or no opportunity to develop capacities for leadership and organization during their undergraduate course?

VII. Is it probable that a considerable number of young women will be graduated from your institution in June without having been successfully drawn into group relationships or given an active interest in community and national questions?

Replies were received from nearly fifty per cent. of the colleges and universities addressed—from twenty-one colleges for women and twenty-five coeducational institutions. These reports showed a very wide sweep of student organizations including the Y. W. C. A.

Student Self-Government Association, Departmental Clubs, Class Organizations, College Publication Committees, Debating Clubs, Sororities, Honorary Societies for Women, and Political Clubs. By far the greater number of these societies were organized by the students themselves and were solely concerned with college and academic interests.

An analysis of the replies in detail reveals some interesting facts. In the answers to Question I (see above) reference was made to one or all of the following "deliberate" means of social education: (1) the work of student organizations, (2) courses in history and sociology, (3) lectures by visiting speakers on current questions and social work, and by the Dean of Women on "Social Requirements," (4) the efforts of the wardens of residential halls to give much needed social training, (5) a course for freshman girls on the Fundamentals of College Life, (6) special "attention . . . paid to table manners and every Freshman . . . taken to teas and receptions by upper class girls," (7) efforts of Greek letter sororities to provide "social experience," (8) faculty and student committees, (9) "class functions—especially formal ones," (10) department clubs, (11) attempts by women faculty members and wives of faculty members. Only three institutions declared that nothing was being done or that there was no "organized plan"; and only two Deans of Women expressed doubt or dissatisfaction with the means employed. One of these writes that some deliberate work is being done "but not enough." Another declares that the "social aspects of our university life constitute one of the pressing problems with which the Dean of Women has to deal." She adds in general

vein: "We are trying in every way to make our women students realize their social responsibilities; to give them the right social ideals." Still another dean writes: "We are trying this year to work out a real plan by which a greater variety of social life shall be provided on the campus."

A critical examination of the replies to Question I shows pretty clearly the following conditions:

- (1) The word "social" is interpreted by many institutions in the more restricted sense as applied to education in the amenities of social intercourse.
- (2) The onus of responsibility for the social education of college girls appears to fall upon the students themselves, assisted by the Dean of Women, who may or may not summon to her aid faculty women and wives of faculty members.
- (3) The "deliberate" efforts of college and university to socialize women students consist largely in reliance upon existing student agencies, especially upon the Y.W.C.A., the Student Self-Government Association and the sororities where they exist. There is little evidence in the replies received of a carefully thought out scheme of social education designed to enlist the coöperation of faculty and students alike. In short the aim of developing "civic worth" in college women students has not been made the subject of serious consideration and far-sighted planning on the part of most college authorities. Both aim and methods are in too many instances adventitious, being annexed more or less casually to the intellectual work of the college. This holds true even of the conscientious efforts of deans of women to provide for the social training of the young women in their charge.

The Problem of the Individualistic Girl.—The second question in the questionnaire had reference to the existence of any "organized plan for drawing retiring or self-centered girls into group relationships." The replies received indicate that the college authori-

ties, in general, are content to leave the social training of the shy or individualistic girl to the student organizations in the hope that some one of the various campus activities may appeal to her tastes and develop her social capacities. Some of the answers definitely referred to the efforts of the Y.W.C.A. to draw out retiring girls; while others mentioned the system of junior and senior adviserships as a means of drawing freshmen into college organizations. One eastern college wrote of a large student gathering in the fall at which the different clubs and organizations presented their plans and purposes to the new students and tried to secure as new members those who would be most interested. The reply continues: "A few students probably fail to accept the invitation and are not necessarily followed up indefinitely." Reference was also made by two or three colleges to a "freshman questionnaire" carried on by the Student Government Association in order to discover the "non-academic" interests of freshmen and the offices held by them in preparatory schools.

Obviously these attempts to reach self-centered girls are made by the students themselves, chiefly for the purpose of strengthening and perpetuating their organizations. Nevertheless it would be quite unfair to imply that the problem of the unsocial girl has not challenged the attention of a few discerning spirits among the officers of our colleges and universities—usually the Dean of Women and an occasional woman instructor. The "Big Sister" movement, also, is the outgrowth of a consciously felt need for reaching lonely and retiring girls in order to interest them in their fellow students as well as in the activities of

some group. One eastern college has clearly felt this problem, for its Dean of Women writes: "In the Y.W.C.A. a committee, coöperating with the Dean of Women, goes over the list of students, noting those not active in any organization, and arranging to have some committee secure their services. A "presidents' Council," composed of the executive officers of the young women's societies, "considers the list of those doing active work, and those needing to undertake it, and endeavors to place in congenial work those needing it." A large western university specially delegates the senior advisors "to help every woman entering . . . in making connections with groups of congenial tastes, within which she may find opportunity for development of initiative and executive ability." One eastern university, also consciously attacking the problem, relies on the Junior Advisory system maintained by the Women's Self-Government Association and on a careful organization of the social life in its "smaller houses for girls." This method is also pursued in one of the leading women's colleges, whose dean writes: "We believe that our small dormitories (the cottage system) give the shy and retiring girl a chance to feel herself a not unimportant member of a group." Another woman writes: "The Dean is free to call the attention of the President of the S.S.G.A. to any retiring or self-centered girl and she never fails to meet with a cordial response and an effort on the part of the upper-class girls to aid in helping girls who should be brought forward and interested in social life." One university dean declares that the task of developing individualistic girls is assigned to a "point scale committee" which "has as one of its fundamental

principles the encouragement of this sort of work. Indeed it plans to get all into some activity. The Woman's Activities Association and the Y.W.C.A. each has a committee to aid these girls in finding themselves socially."

It is encouraging to learn that there are particular colleges and universities in both the East and the West where deans and officers of students' organizations are seeking to find ways of drawing the self-sufficient girl into group activities. But it would be too much to say that in general the problem is intelligently attacked or even clearly apprehended. Of the forty-six replies to the questionnaire received, eight made a negative reply to Question II. One writer, after stating that no organized plan existed, added rather amusingly, "I fear this is where sororities in general fail to see their opportunities."

Organized Community Work.—The third and fifth questions in the questionnaire had reference to the means employed "to bring young women into contact with the problems and needs of the community and to furnish opportunities for active coöperation and service." The fourth question had to do with the existence of clubs for the political education of young women. These three questions may be considered together. Of the forty-six institutions replying to the questionnaire, nine mention the Intercollegiate Community Service Association as having the definite object of interesting students in community work. This Association was organized during the World War "to aid the college alumnae of the country to wider and more effective service in their own communities and in the European need of the moment." Chapters of the

Association have been organized in several of the women's colleges and in the liberal arts colleges of the coeducational universities, each chapter adopting a constitution of its own. A study of the community is undertaken to learn its needs and attempts are made to interest college women in the work of the organization through public meetings, chapter and cabinet meetings, interrelation with chapters in other colleges and with the departments of economics and sociology in the colleges themselves. The Association is not religious in character and thus it appeals to many young women who are not interested in or who would be barred from membership in the Y.W.C.A. Within the last two years a large part of the social service work at Wellesley, Mt. Holyoke, Smith, Barnard, Vassar, and Bryn Mawr is maintained by this Association.¹

The Social Service Committee of the Y.W.C.A. is also making well-planned efforts to arouse young women to active interest in some phase of community work. Twenty-eight of the forty-six replies contain specific mention of the Y.W.C.A. as one of the outstanding organizations in the practical social training of college girls. Other agencies mentioned once or more are the Bureau of Vocational Opportunities, the Red Cross Committee, a series of lectures by visiting lecturers, the Epworth League and other church organizations, Current Events Club, the organized field work of the departments of Economics and Sociology, the Child Welfare Council, Eight Weeks Clubs, Community or Social Service Clubs, Sociology Club, the Home Economics Department which, in one univer-

¹ See *Jour. of Assoc. of Coll. Alum.*, February, 1918, pp. 371-3.

sity, "is working out some interesting experiments along social lines" and "strong rural courses emphasizing community service."

It will be noted that, of these agencies, at least two—the Current Events Club and the lecture courses—do not provide for practical work. Moreover the work of church organizations is almost wholly outside the college; and the influence of the economics, sociology, and home economics courses probably does not extend beyond the students enrolled in those departments. Nevertheless it is clear that, in a considerable number of colleges and universities, some attempt is made to interest women students in community or welfare work. One influential western university states that its students support "a public health worker in China"; and a leading woman's college refers to the fact that its students "support a chair in Ginling College, and have certain other educational and philanthropic responsibilities. . . ." An eastern university mentions with pride six practical courses in sociology, all of which are "in close touch with civic organizations and all use the city as a laboratory"; and a New England college refers to the "regular social work in adjoining factory towns" carried on by its students. Perhaps the most interesting organization for the social training of women mentioned in the replies is the Service League of the Connecticut College for Women. The League is a student organization which seeks "to unite its members by bonds of friendship and loyalty and to inspire them to give their sympathy and to dedicate their services to the advancement of college interests, community welfare, and national and international causes destined to benefit humanity."

The work of the League is in charge of a Fellow in the Sociology department who is recommended by that department in which she actively works. The fellowship is created and maintained by the Service League and is endorsed by the Trustees of the college. In Connecticut College the sociology department "is actively interested in creating a laboratory for research work in so-called 'Americanization' problems"; and the League strives to aid its efforts by making the college an Americanization center from which is sent out each year a trained Americanization worker. Within the campus the work of the League is organized under committees whose names clearly indicate their work: *e.g.*, maids' committee, student employment, book-exchange, lost and found, etc. The extra-campus services of the League are organized under committees the chairmen of which are major students in sociology who carry on this work as field work. To quote in full from the detailed reply to the questionnaire:

"Off-campus service takes the form of stimulating and organizing any work that will tend to bring together and interpret to each other the racial groups in the city. The two outstanding phases of this work are Mothers' Clubs and Children's Movies.

"Monthly meetings have been held in a public school for foreign mothers—lectures, entertainment and refreshments being offered. Out of this grew an Inter-racial Handicraft Exhibit, held in coöperation with a community committee. On the opening day, an Inter-racial program was given in honor of New London's two hundred and seventy-fourth birthday. Eleven foreign groups offered entertainment and over seven hundred people attended the performance. The Folk Handicraft was exhibited for three days in the Court House, over one thousand articles were contributed and the visitors represented all elements of the community.

"The effort to bring the children of foreign and American parents together for the purpose of diverting their interests from unwhole-

some movies is a serious problem in a community whose chief recreational interest is the well-known adult performances of 'thriller' serials.

"The Sociology students made a preliminary survey of the attendance of children at the performances of the local theatres. Each student has been in charge of one of the monthly performances of the Children's Pleasure House. They have succeeded in securing and registering at the office for future use, a body of material dealing with the efforts throughout the country to improve picture life for children.

"The Children's Pleasure House has shown the following films: Cinderella, Ali Baba and the Forty Thieves, Snow White, Tom Sawyer, Seven Swans, and Huck and Tom. The performances have taken on the aspect of informal parties, the audiences spontaneously responding to creative stimuli as they appear during the supervised play in the school yard for early comers and the community singing between the reels. Community spirit and coöperation is probably best illustrated by the offer of music by a children's orchestra directed by a self-termed 'executive' of twelve years. The applause of the five or six hundred children that greets the dwarfs at the moment they save Snow White from the poisoned comb far exceeds any even given the Mid-Night Man when he rescues Helen Holmes from the lion's den. The reaction of the audience affords as much pleasure to the College girls who act as guardians (there are lawful reasons for attendance in that capacity) as the pictures to the children.

"Not less important than the work of the Sociology department in this venture is the coöperation of the Art department of the College. The students of this department supply attractive and artistic posters which are placed in the public schools advertising each performance. (Article in *Survey*, May 15.)

"Other branches of community work have been a club for factory girls, a weekly information bureau for foreigners, mental clinic follow-up work.

"The League is connected with the National Consumers' League, the National Committee for Better Films, Christodora House of New York, to whose summer camp the League sends one councillor, and the New York Charity Organization Society, to whom one Junior is sent on a summer scholarship.

"The League not only conducts this community program but also raises its own budget."

Such a thoughtfully planned effort to enlist the interest of American college girls in real social problems at the same time that they are encouraged to *do* something toward their solution seems decidedly worth while. The account of what these young women have actually accomplished in linking social knowledge with organized social action warms the heart and strengthens the hopes of those educators who deplore the academic isolation of our higher centers of learning from the common social life.

Unfortunately such happy unions of theory and practice are not numerous. Too often the only agencies mentioned in the replies to the questionnaire are "sociology classes," "economics classes," "morning talks" by the president or dean and visiting lecturers, —with no mention of field work. Only two colleges bluntly declared that nothing was being done to train young women in habits of community coöperation. But certain other replies indicated little sympathy with practical social work on the part of students. One dean declared: "Our students have little time for such work"; another stated that "We deprecate 'organized' effort in this work during college years." Still another administrator in a middle western college replied with apparent regret that the "Economics, Sociology, and Home Economics Departments (are) curiously lacking in this."

The replies to Question IV concerning the existence of clubs for the political education of young women were, on the whole, more encouraging. To be sure, 10 out of the 46 colleges and universities replying, stated that no such clubs had been organized and one college reported that a citizenship class was planned "for next

year." But of the remaining 35 institutions all had instituted one or more clubs and classes for the political education of girls. Doubtless the passage of the Nineteenth Amendment will shortly bear fruit in well-planned efforts to instruct our newly enfranchised women in the problems of government in those colleges still ignoring this need.

Training in Leadership.—Question VI of the questionnaire had reference to the opportunities for leadership afforded young women in colleges or universities under consideration. Almost without exception the replies indicated that, through the various college organizations,—athletic, student government, social, political, religious,—the women students had been offered "ample opportunities" for developing initiative and leadership. Frequent reference is also made to the fact that the "point system" makes it impossible for a young woman to hold more than one major office in student activities; thus the opportunities for active leadership are increased. Likewise the smaller colleges stress the fact that, because of their limited numbers, a large proportion of their women students are called upon for leadership in special social functions as well as in student organizations. This, no doubt, is true.

But, despite the rather general complacency which the replies reveal, not a few of the writers express a greater or less degree of dissatisfaction with the situation as it exists in their own college or university. One dean writes that "about 50 per cent. neglect possible opportunities that might be utilized"; another states that about 25 per cent. of the senior class have

had no training in initiative or leadership. Another says that there are "always some who do not care for leadership. Teachers are expected to assume it." A small college in the West reports that in its senior class are three women who are as non-social as when they came. "One is diffident, a second is indifferent and the third is individualistic on principle." From a well-known university comes the report that probably none of the women students has lacked opportunity for leadership. But the Dean of Women adds: "Perhaps not more than half have availed themselves of it." Another writer frankly declares: "Probably two-thirds have taken very few responsibilities"; another estimates the proportion as two-fifths. An eastern college reports: "About 60 per cent. *have*, in greater or less degree, developed such capacities—that the remaining 40 per cent. *have not* is due only in part to lack of opportunity." One reply declares that, "excluding purely social, sorority interests," probably 65 per cent. of the women students have failed to develop initiative or leadership. Finally, the statement of the Dean of Women in a leading state university is well worth quoting: "There is unlimited opportunity *for those who have initiative*. But it is possible for the individual 'born to blush unseen' to live on in almost complete isolation." (Italics mine.)

On the whole it would seem that college authorities have been content to let the problem of developing leadership and initiative rest squarely upon the shoulders of the student organizations. The prevailing attitude of faculty and deans seems to be that the opportunities for training in these valuable social qualities are furnished abundantly enough; if the stu-

dents fail to avail themselves of their opportunities it is no one's fault but their own.

There is another aspect of this matter of student leadership that should not be ignored. The writer's experience, and that of every Dean of Women with whom she has discussed the question, is to the effect that a relatively small proportion of young women who serve on committees or faithfully attend the meetings of the Student Government Association ever have a chance to assume real responsibility. This is too frequently taken over by the chairmen of the student organizations and the officers of the Self-Government Association. Students have been heard to say that they will waste no more time at mass meetings, since all direction is in the hands of the few leaders and they are simply called together to approve policies already decided upon. One Dean of Women, replying to the questionnaire, stated that after making a canvass of the women students in the university to ascertain the number in the various organizations she found that the offices were held by 6 per cent. of the students. A further inquiry might have shown that this percentage included committee members rarely called together and even more rarely given opportunities to initiate plans or share in the work of executing them. However, it is only fair to say that the so-called "point system" is specifically designed to increase opportunities for leadership by prohibiting any young woman from holding more than one major office in student activities. Whether the system is generally adopted or whether it accomplishes its end when it is adopted are fair questions. Certain replies seem to indicate an unsatisfactory con-

dition in this regard. Thus one dean reported with considerable pride that, by the adoption of the point system, 25 per cent. of the senior class exercised some degree of leadership—quite ignoring the 75 per cent. who had been content to follow with various degrees of interest or indifference. Would not an investigation of this matter disclose a small inner clique of real leaders in every women's college or university—a group endowed with executive capacity of a high order which will always find opportunities to express itself in a variety of social situations? American colleges are by no means lacking in girls with records like the following, described in the *New York Times*:¹

"Miss —— is an all-round athlete and prominent in many college activities. She is proficient in basketball, baseball, tennis, and hockey, and is fond of hiking and camping. Since her freshman year she has been song leader of her class and this year is college song leader. She is senior House Chairman of one of the largest off-campus residence halls and a member of the advisory council of the Students' League. She is also prominent in Y.W.C.A. work, being leader of one of the Bible classes for freshmen. For four years she has sung in the college choir. Her academic interests are centered in economics and biology, and to gain practical experience she worked last summer in a textile factory. . . ."

This young woman and others like her need little stimulus to develop their capacity for leadership. They can safely be left to take care of themselves in the ordinary college environment. But what shall be said of the majority of girls not gifted to frame plans and policies and help to carry them through? If this group receives no intelligent, constructive help it is difficult to see how they can hope to meet effectively

¹ Nov. 22, 1920.

the new responsibilities laid upon them by their full rights of citizenship.

Unsocialized Students.—The last question in the questionnaire was framed to discover whether the college had failed to draw any considerable number of the last graduating class (1920) into group activities or to give them a dynamic interest in public affairs. Of the forty-three answers to this query twenty-two, or slightly over 50 per cent., were in the negative. The writers seemed firmly convinced in most instances that their out-going seniors had been thoroughly socialized during the four years of their college life.

Not so encouraging, however, were the answers received from sixteen colleges and universities. Five replies acknowledged a proportion of failures without qualification. One Dean of Women, widely known for her active interest in progressive social movements, frankly replied: "Yes, not only probable but certain." Another answered: "Yes, but the fault frequently is theirs for they refuse to be drawn." Still another Dean of Women wrote: "I fear 50 per cent. of the Senior Class will be of this type. They have had opportunity to get interested but are not." This reply is almost unique in revealing some dissatisfaction with the methods employed to awaken social interest, for it concludes: "The right appeal has not been made." In a large western university the plan was tried of inviting each woman of the senior class to "sign up" indicating what activity she would like to promote. The records showed that about 50 per cent. of the senior women "signed up," and this is probably a high proportion as colleges go. The dean of one of our oldest

women's colleges declares that it "is probable that in every senior class there is quite a group that has not been aroused to interest in community and national questions." Another reply states that there "are always a considerable number from each class that do not form group relationships, but it is doubtful if more opportunities would change the situation." The president of the student government organization in a well-known state university writes: "It is still entirely true that a considerable number of young women will leave the University without having been successfully drawn into group relationships, but we have decided that it is exceedingly difficult to change entirely in four years habits which have been in the making for a much longer time."

In two instances the replies indicated that, whereas very few seniors had not taken some active part in student organizations, a considerable proportion of the class were indifferent to public issues. Thus one Dean of Women writes: "I am sorry to say that I see no serious interest in community and national questions on the part of our students as a body. Many individuals are interested and enlightened, but relatively they are few." Another dean declares that "comparatively few girls have a real interest in national questions. I should say not more than one-third." Finally an ironic reply from a coeducational college is worth quoting: "There are—fortunately—a few born specialists in the class whose interests are 'predominantly intellectual'—a larger number whose interests are predominantly romantic and domestic; but the majority of our young women are awake to community and national questions."

Summary and Conclusions.—It has seemed worth while to quote in some detail from the replies received to the questionnaire because they not only bring out contemporary conditions and trends in higher education with respect to the civic training of women, but they make manifest the prevailing attitude toward this question. *The conclusion seems inevitable that a majority of college administrators are content with the means now offered for training girls in social responsibility and are prone to conclude that the students who fail to use their chances have only themselves to blame. If a young woman leaves college as individualistic or as indifferent to social problems and needs as when she entered, it is not because she hasn't been 'exposed' to a variety of opportunities to remedy her defects. Obviously no such attitude would be taken by college officers if a young woman's intellectual capacities fell below the standard. In such a case she would be summoned to the office of the Dean of Women, or of her academic advisor, in order that the difficulty might be clearly understood and dealt with. The student's deficiencies would constitute a problem and a challenge, not a condition to be more or less supinely accepted. Plans would be formulated for giving her special assistance in meeting her intellectual difficulties, either by way of helping her to work out more intelligent methods of study or of giving her the basic information which she lacks. Not until these plans had proved unsuccessful would professors and administrative officers give up the girl as hopeless; but in that case she would be denied the coveted bachelor's degree. When college authorities "see life steadily and see it whole" they will attach

an importance to the development of the social capacities of women approximate to that which they accord to the training of intellectual abilities.

In the light of history it can scarcely be denied that *higher education in the past has tended to result in personal culture rather than in socialized behavior*. And until studies in government, sociology, and economics are linked with the activities of individuals in community life “the actual behavior of pupil-citizens in civic affairs” will, in most instances, be little affected by those studies.

CIVIC EDUCATION OF GIRLS IN HIGH SCHOOLS

Until very recent years the high school in America has suffered from the same historic malady as the college—it has regarded its function as the imparting of information, with the dual aim of giving students a “general education” and of preparing a select minority for college. Not only has very little been done to link the high school with the community but even the “academic” study of social institutions and problems has been grossly neglected. Writing in 1918, Professor Inglis charged that in “many secondary schools at the present time it is possible for pupils to pass through the entire course without coming into contact with the social sciences.”¹ The high school, even more than the college, has failed to capitalize at their full value the social interests and impulses always generated where adolescent youths are regularly brought into association. And because educators have ignored this fact students have taken the matter into

¹ Inglis, *Principles of Secondary Education*, p. 569.

their own hands and have sponsored a variety of clubs and organizations—some within, some without the school—which have frequently interfered more or less seriously with school work and, in not a few instances, have had a purely frivolous purpose. “This situation,” writes Stout, “constitutes a very practical problem which thrusts itself upon the school and which the school is wholly unable to grapple with in the absence of a proper social organization of its own. These social functions may be harmless enough in themselves. But the frequency with which they occur and the late hours incident to them and the absence of direction and control, render them hindrances to the work of the school; and they too frequently have a demoralizing influence upon the young people themselves.”¹

The waste of the social interest and energy of girls in a round of meetings of Greek letter societies and so-called literary clubs appears the more deplorable when we recall the splendid public services of American girls during the World War. Their capacity for wider social vision, for self-forgetful service, and unstinted expenditure of energy for the common good were then abundantly demonstrated. “The war-time call was one for *enlistment*—enlistment *by girls with girls*” and loyally did the girls rise to meet it. The work of girls’ clubs in the Red Cross, in selling Liberty Bonds, in the food conservation movement, in adopting and clothing French orphans, in protective work for girls living near army camps was a magnificent refutation of the charge of certain carping Mrs. Grundys that the modern girl is a selfish, pleasure-

¹ John E. Stout, *The High School*, p. 237 (1914).

seeking individualist who has impatiently thrown off most of the social restraints of her mother's generation, while she denies the validity of its religious sanctions.

Since the armistice this precious fund of public spirit has been allowed largely to go to waste. It is a mournful truism that human nature often reveals its finest social loyalties, its noblest capacities in behalf of the common welfare under the stress of war. Educators to-day are squarely confronted with the problem of how to kindle, in piping times of peace, dynamic social impulses in boys and girls and harness them to the service of the community and the nation.

During the past few years the leaders of educational thought have shown signs of awakening to the mistake involved in the neglect of the social education of adolescents. This awakening is shown in the prevalent tendency to criticise the teaching of civics as too formal and too much concerned with the machinery of local, state, and national government. The view vigorously expressed by Inglis is becoming widespread:

"The mere attainment of a knowledge of our social-civic organization or even the development in the pupil of a sense of civic responsibility and ideals of civic conduct is not sufficient. Unless such knowledge, such a sense of social responsibility, such civic ideals, are translated into forms of behavior and result in proper civic action, the values of the study of civics cannot be attained. Here, more than in the case of most studies in the secondary school, direct values are dominant and no accumulation of information concerning the function of government or the relation of the individual to government can take the place of the development of social attitudes and tendencies to act."¹

¹ *Principles of Secondary Education*, pp. 560-61.

Such promising evidence that the principles of behavioristic psychology are at last being applied to teaching civics is strengthened by the *Report of the Committee on Social Studies* of the Commission on the Reorganization of Secondary Education. This valuable Report,¹ after emphasizing the importance of "community civics" as most closely related to the experience of every child-citizen, defines the purpose of such study as follows:

"The aim of community civics is to help the child to know his community—not merely a lot of facts about it, but the meaning of his community life, what it does for him, and how it does it, what the community has a right to expect from him, and how he may fulfil his obligations—meanwhile cultivating in him the essential qualities and habits of good citizenship."²

Furthermore the Committee on Social Studies cordially recommends the study of "Problems of American Democracy, Economic, Social, Political." It declares that such a subject should be the "culminating course of social study in the last year of the high school, with the purpose of giving a more definite, comprehensive and deeper knowledge of some of the vital problems of social life and thus of securing a more intelligent and active citizenship." It is encouraging to note that the Committee favors such methods of teaching this subject as will ensure to every student "*experience and practice* in the observation of social phenomena as he encounters them; that he should be brought to understand that every social problem is many-sided and complex; and that he should acquire the habit of dispassionate consideration of all the facts available." Finally the Com-

¹ See *Bureau of Education Bulletin* No. 28, 1916

² *Op. cit.*, pp. 22-3.

mittee registers its belief that these results "can best be accomplished by *dealing with actual situations as they occur* and by drafting into service the materials of all the social sciences as occasion demands for a thorough understanding of the situations in question."¹

The Committee's heart-whole abandonment of the prevailing logical and theoretical presentations of civics in favor of an empirical study may be taken as a hopeful index of a general change in theory as regards the teaching of this vital subject. And signs are not lacking that here and there, throughout the country, public-school teachers and administrators are putting their new ideas into practice. City system after city system has set to work to revise its course in civics or social sciences so as to bring the work closer to the actual problems and activities of community living. The new *Syllabus* for first year high school civics in New York City begins with the consideration of such every day questions as The City's Water Supply, Guarding the Health of the People, Protecting the Food of the City, The Problem of Housing, etc. The *Syllabus* also favors judicious visits to public buildings and questioning of such officials as are not too busy, use of "laboratory material," such as bills and resolutions of the Assembly, and Minutes of the Board of Aldermen, study of newspapers, and use of filing cabinets and bulletin boards. On the whole, however, although the new plan for teaching civics in our metropolitan city is a vast improvement over the old, there is much room yet for the courageous adoption of genuine field work, how-

¹ *Op. cit.*, p. 56. Italics mine.

ever difficult this may be. The same may be said for the courses in civics, economics and social problems in other high school systems. Although the tendency is to lay emphasis "first on the political and social problems of the city, leading to the broader state and national questions," and to encourage visits to local institutions and industries, the courses of study still show clear traces of the older methods of logical arrangement of subject matter obtained from books.

A League for Civic Education.—One of the most promising experiments for the education of girls and boys in habits of good citizenship is the Junior Civic and Industrial League established in 1914 in connection with the public schools of Lincoln, Nebraska. This League developed out of a series of conferences held between the Superintendent of Schools and the Secretary of the Commercial Club of Lincoln—conferences which "established the fact that a strong sentiment existed among the business men of the city favorable to the formation of some definite plan whereby the schools and the business men should co-operate in making it more easy for the boys and girls to become familiar with the industrial and civic life of the community. A plan was adopted providing for an organization of boys in the fifth grade and above to be sponsored jointly by the Commercial Club and the schools and to be made up of clubs from each school. The purely civic purposes of the League, as set forth in its publication, *The Junior Citizen*, were declared to be as follows:

- "1. To study the civic and industrial life of the city by first hand observation.

2. To connect more closely the work of the public schools with the life of the community.
3. To teach its members to aid effectively in meeting the civic needs of the community and to assist every civic institution in promoting the general welfare of our city.”¹

Shortly after the boys' league was instituted a similar organization for girls was established. In 1917-18 a census of the Junior Civic League showed that 1,053 boys and 935 girls were members.

Needless to say the new and valuable features of this plan are first, the coöperation of the Commercial Club, composed as it is of business men who can command opportunities for opening up the resources and the machinery of the city to its girls and boys; and second, the strong emphasis placed on *civic projects*, on actually doing something to promote the city's welfare. Three large projects were carried out during the school year 1917-18: (1) the securing of 10,136 signatures to the membership cards of the United States Food Administration, (2) gathering data about 962 acres of back yards and vacant lots available for gardening, (3) a city-wide campaign to exterminate the Tussock moth.²

From time to time efficiency certificates are awarded by the Commercial Club “to those members whose character, habits, and scholarship entitled them to special recognition.” Here again, the active and continuous interest of the business men of the city in the civic training of its youth—girls as well as boys—is conspicuous and almost unique. Unquestionably this sympathetic relation existing between a club of promi-

¹ *Op. cit.*, p. 5. The Industrial purposes of the League have been omitted from the above.

² *Ibid.*, p. 7.

nent citizens and the Junior Civic League imparts a vitality and significance to the plans and efforts of the girls and boys which are keenly felt by them. The success of the scheme suggests the advisability of trying it out in other cities where the study of *community civics* still remains too bookish and removed from everyday civic concerns.

A Study by the North Central Association.—In 1919-20 the North Central Association, through its Commission on Secondary Schools, sent out a questionnaire to each high school accredited by the association in order to discover “precisely what practices are being carried on in the secondary schools of the land with the direct intent of developing qualities of citizenship among the students enrolled in those schools. . . .” The four main divisions of the study were:

- “A. Provisions for arousing desirable *sentiments* of citizenship.
- B. Provisions for furnishing *information* relating to the privileges and duties of citizenship.
- C. Provisions for securing from pupils *active participation* in affairs that tend to develop habits of spontaneous, and also studied, responses that make for good citizenship.
- D. Expressions of the personal views of principals regarding certain specific policies.”¹

A preliminary report was presented at the annual meeting of Secondary School Principals in Cleveland, Ohio, February 23, 1920. Questionnaires were returned from 1,180 schools distributed over 18 states. The returns showed that the *provisions for exciting sentiments of citizenship* included assembly talks, patriotic music, oral and prescribed readings, dramatization (only 398 schools), pageantry (353), moving

¹ See the preliminary Report of the Association prepared by C. O. Davis in the *School Review*, April, 1920, p. 266.

pictures (290), stereopticons (438), teaching of literature (1,030), excursions (495). The provisions for *providing information respecting citizenship* included the teaching of civics (1,148 schools), elementary sociology (298), elementary economics (696), current events (1,008), "morals, manners, and life problems" (112), occupations (194), history, taught with the end of making "every boy and girl believe and understand the worth of being free" (1,057), biography (1,012), problems of labor and capital (assembly talks, debates, current events or class work, 1,193), wholesome use of leisure (athletics, talks, readings, supervision of student affairs, student clubs, 1,015).

Most suggestive were the replies to Division C which concerned itself with the question of the *active participation* of pupils in civic affairs that tend to develop habits of good citizenship. A table summarizing the replies follows:¹

| TYPE OF AGENCY | NO. SCHOOLS HAVING | NO. SCHOOLS NOT HAVING | NO. SCHOOLS NOT REPLYING |
|---|-----------------------|---------------------------|-----------------------------|
| 1. Junior Red Cross Societies | 880 | 172 | 128 |
| 2. Junior Good Citizen- ship League..... | 76 | 658 | 446 |
| 3. Boy Scout Organization.. | 651 | 305 | 224 |
| 4. Girl Scout Organization... | 522 | 387 | 271 |
| 5. Thrift Clubs..... | 421 | 458 | 301 |
| 6. School Paper..... | 666 | 360 | 154 |
| 7. Military training..... | 208 | 720 | 252 |
| 8. Debating Clubs..... | 863 | 194 | 123 |
| 9. Mock elections..... | 568 | 379 | 233 |
| 10. Student self-government... | 306 | 550 | 324 |
| 11. Community centers..... | 373 | 398 | 309 |

A study of the table is rewarding in that it shows the spread in the high schools of the Middle West of such

¹ *Op. cit.*, p. 275.

wholesome organizations and activities as the Junior Red Cross, the Boy and Girl Scouts, debating clubs, school papers, and mock elections. Not so encouraging, however, are the returns in regard to other organizations. It is surely no cause for congratulation that of 1,180 high schools reporting only 76 should have established good citizenship leagues, even though 672 principals went on record as in favor of organizing Junior Civic Leagues. Nor is there occasion for pride in the fact that only 373 schools reported the establishment of community centers and only 306 the organization of student self-government. It is a striking commentary on the views of American educators concerning the kind of education suitable in a democracy and for a democracy that more than two-thirds of the 1,180 high schools under consideration still govern girls and boys from fourteen to eighteen years of age by authority imposed from above. It is more than probable that a similar study of the secondary schools in the East and South would reveal an even higher proportion in which student self-government is an empty name.

CIVIC TRAINING IN GIRLS' TRADE AND INDUSTRIAL SCHOOLS

Up to the present time the number of trade and industrial schools for girls established in this country is very small. A request for information sent to a dozen of the more prominent of these schools in different parts of the country brought replies that made abundantly plain the fact that most trade schools give no time at all (if their announcements may be trusted) to the task of developing in work-

ing girls civic interests and knowledge or of training them to take an active part in community affairs. It is as if the managers and teachers in these schools regarded their duty as solely a preparation of their students to earn their living in a semi-skilled or skilled employment with a minimum expenditure of time. Such a viewpoint ignores completely the fact that the life of the humblest citizen is not wholly circumscribed by his or her daily work, but normally includes interests and activities centering about the family, the social group, and the state. No woman lives by work alone; and to restrict her education, after the age of fourteen, wholly to specialized occupational training is to regard her as a working machine.

A few exceptions to the general attitude of indifference to the civic education of working girls should be noted. The Boston Trade School devotes two and one-half hours weekly to so-called "related work" or "general work." Included in these studies are courses in home nursing and community civics. Likewise the North Bennet Street Industrial School of Boston, in its prevocational classes for girls, includes work in civics and current events which are thus described in detail:

"Civics: Citizenship, naturalization, voting, duties of the individual to the community, city government.

"Current events: (Much of our history leads back from the present into the past.) Present federal administration as a starter tracing back thru the years to revolutionary days."

This is surely good as far as it goes, although there is no indication that "the duties of the individual to the community" are taught in connection with practical social work. However, one of the most useful services of the school is carried on through the Social

Service House, a neighborhood settlement with a membership of 447 persons organized into 26 clubs. This represents an attempt to organize community effort in a section of the old North End of Boston inhabited by a high proportion of the foreign born.

The Manhattan Trade School of New York offers two courses to every one of the approximately eight hundred girls enrolled in the school at any one time. The first course is in "Citizenship" and is allowed the equivalent of two hours weekly for one term; the second is a course in "Labor Laws" to which about the same amount of time is allotted. In the citizenship class such topics as the following are discussed: the meaning and responsibilities of citizenship; how citizenship is obtained; persons not eligible; naturalization; how United States citizenship may be lost; the need for government; government of the United States; state and local government; political parties and the nature of political issues. In the other course the labor legislation of the United States and the State of New York receive attention, especially that relating to factory inspection, the child labor laws, the laws relating to women's labor, and laws concerning sanitation, fire protection, and accident prevention. Both these courses are taught with constant reference to the needs of girls in trades and industry and, so taught, should prove of very real value in the girls' daily working lives.

The Philadelphia Trade School for Girls, taken over from private agencies in 1918 and ably administered for several years by Miss Cleo Murtland, offers, apparently, a rather thorough and carefully planned course in "Civics and Business Relationships." The *Report*

of this school for the year ending December 31, 1918, thus describes the general purpose and subject matter of the course:

CIVICS AND BUSINESS RELATIONSHIPS

TEXT AND REFERENCE BOOKS

The Community and the Citizen—Dunn

Civics Course of Study—Philadelphia Public Schools

A Course in Citizenship—Ella Lyman Cabot.

Child Labor Leaflets—State and City

Bureau of Compulsory Education Leaflets

Your Vote and How to Use It—Brown

Vocational Civics—Giles

Philadelphia, Story of—Dr. Lynn Barnard

Civics, more than any other subject taught in the schools, deals with present-day immediate affairs and it is live and useful in proportion to its connection with daily life and happenings. The course outlined here indicates a method of selection of subjects to be considered in a course of civics for young working girls. The outline is intended for the teacher's use only and is intended to serve as a guide in the selection of topics and interpretations to be made.

The subject is most successfully taught by the discussion method, which encourages the discovery and study of the important points in any given topic. The pupils' opinions on such topics as compulsory education, child-labor laws, traffic regulations, the water supply, street cleaning, and the like, gives the teacher an opportunity to direct thought into right channels and to increase individual sense of responsibility.

The underlying principles of government that by its regulations insures the greatest good to the greatest number, that laws are made to protect, not to punish, unless the person punished has transgressed and so interfered with the comfort and freedom of others should take precedence over the mechanics of organization. The fundamentals of organizations, selection and election of officials can be taught in connection with the school council. With this background some of the more remote phases of election and government organization—local, state, and national—may be taught.

The first two copies in the outline (Compulsory Education Law and Child Labor Law) have proved of great value in introducing the subject of civics to girls about to enter wage-earning careers because of their close connection with her school and working career. The order of topics is not significant, but in teaching it is important that subjects be presented in the order of their interest to the pupils.

There follows a detailed outline of the course which, if it is intelligently carried out, represents a hopeful beginning, not alone in recognizing the importance of civic enlightenment of working girls, but also in providing a course which is at once liberalizing and in close connection with the affairs of every day life.

Much remains to be done, however, before trade schools for girls, as well as high schools and colleges, are prepared seriously to attack the question of training girls to be intelligent and active citizens. The trade school of to-day has to meet a special difficulty which the higher schools are spared—that of justifying to the girls and their parents every subject that is taught as of *immediate practical value* to the student. With the restricted outlook upon life of these workers, courses in hygiene, home-making and civics too often seem unimportant, having little relation to the business of earning a living. Thus the trade school errs in precisely the opposite way from the high school and college: the former applies so narrow a standard of utility to school studies that it would exclude nearly all but those immediately concerned in developing technical skills having a wage value; whereas the woman's college, cloistered in the midst of its trees and shadowy paths, too often makes only "theoretical sallies into the world outside" and is fairly content that the walls of the campus should bound for the

students "their interests, their conversation, their enthusiasms, their experience."

SELECTED READINGS

American Academy of Political and Social Science, Annals, Vol. LXVII, 1916. Series of articles on "New Possibilities in Education."

"Cardinal Principles of Secondary Education." *Report of the Commission on the Reorganization of Secondary Education appointed by the N. E. A.*, 1918. pp. 13-16.

DAVIS, C. O., "Training for citizenship in the North Central Association secondary schools." *Sch. Rev.* April, 1920. pp. 263-282.

FERRIS, HELEN J., *Girls' Clubs*. Dutton, 1918.

FRETWELL, ELBERT K., "Education for Leadership: training Citizens through Recreation." *Teachers College Record*, XX: 324-52, September, 1919.

GOODSELL, WILLYSTINE, "Some Effects of the War on the Higher Education of Women." *Proc. of N. E. A.*, 1919. pp. 407-12.

HART, SOPHIE C., "Relation of College Experience to Present Social Demand." *Jour. of A. C. A.* Series III, No. 18, pp. 54-60, December, 1908.

HOLLISTER, HORACE A., "The Woman Citizen: a Problem in Education." Chs. I, II, VII. Appleton, 1918.

KERR, MINA, "College Community Life as an Opportunity for Socialization." *Proc. of N.E.A.* LVI: 402-4. 1918.

Outlook, CXXV: 182-88, 298-301, 350-62. September, October, November, 1919. Series of articles on new methods of teaching community civics in New York City public schools.

ROBINSON, HELEN R., "Preparing Women for Citizenship." Macmillan, 1918.

SLATTERY, MARGARET, "The American Girl and her Community." Pilgrim Press, 1918. "The Girl in her Teens." S. S. Times Co., 1910.

WOOLLEY, MARY E., "The Civic Responsibility of the College Woman." *Jour. of A. C. A.*, VII: 11-16, January, 1914.

CHAPTER VIII

MANNERS AND MORALS

The Insurgent Girl.—In the previous chapter the term “social education” has been interpreted in its broader meaning as a preparation for civic usefulness. But, obviously, in a more restricted sense it has to do with training to meet the social situations naturally developing out of social intercourse. Those who have had much to do with the education of adolescent girls well know that one most pressing problem is how to utilize the social feeling always generated where young people are brought together in such a way as to develop in them worthy standards of manners and morals. The question is rendered peculiarly difficult at the present time by the fact that social standards, accepted unquestioningly less than two decades ago, are themselves undergoing radical change. Add to this the fact that the young people of the twentieth century appear to some of their elders as unruly mutineers, wilfully opposed to the observance of any standards other than those dictated by their individual caprices, and the problem is seen to be involved and delicate. Current literature abounds in descriptions of the insurgent young woman of to-day, who turns her back with entire self-assurance on the mid-Victorian standards of her grandmother and asserts her inalienable right to frame her own ideals of conduct and abide by

their consequences. The opposition between the old order and the new, between sedate middle age and rebellious youth, is convincingly set forth in a series of contemporary articles in the *Atlantic Monthly*. The opening gun is fired by "Mr. Grundy" who seeks to discover where the responsibility lies for the "supply of ill-bred young hoydens whose well-aimed blows give Society its black eye. . . ." Very wisely, it would seem, he decides that "fathers, mothers, sons, and daughters are all found guilty, though in different degrees; . . ." Therefore he urges fathers to reason with their daughters, even exercising patriarchal authority, if they must; while he exhorts mothers "to tell their daughters truthfully and simply the effect of some phases of their social laxity on the men whose moral fibre they are weakening."¹

In a subsequent article, Mrs. Grundy tends to emphasize conditions rather than persons as chiefly responsible for the vulgarity and recklessness of a familiar type of modern girl. After heaping blame on the movie, the war, the "radical intellectuals," the luxury of the *nouveaux riches*, she reaches the conclusion that "the abandonment of religion is probably most responsible of all, since it bears a causal relation to most of those other facts." Because the old religious sanctions no longer have great weight, even with adults, because our moral standards are no longer rooted in religious authority, "we are all bewildered and do not know just where to draw the line. The result of that state of mind is to have the line drawn a great deal further along than anyone expected."²

¹ "Polite Society," by Mr. Grundy, *Atlan. Mo.*, May, 1920.

² Katherine Fullerton Gerould, "Reflections of a Grundy Cousin," in *Atlantic Monthly*, August, 1920.

Possibly Mrs. Gerould is right, at least in part, in her diagnosis of a modern malady; but the feasibility of restoring what she is pleased to call "definite religion" seems doubtful. Meanwhile "A Last Year's Debutante" assures us that society "isn't rotten—it only looks so and . . . all these sensational bids for popularity, which we [i.e., rebellious young people] have borrowed for a little while from the variety stage and which have been dragged into the limelight by our virtuous critics, are *not* the signs of social degeneration, but the inevitable result of a revolution that is being waged everywhere." This breezy young woman declares with much truth that youth has been hoodwinked about many things by its elders and now it "wants to find things out at first-hand." With complete *savoir faire* she throws down the gauntlet to Mr. Grundy and all his ilk in the words: "We'd rather be wrong in our own way than right in someone else's, and you've just got to let us work out our own salvation, because we don't believe there is any other kind."¹

But *can* deans and advisers of girls, burdened as these foster mothers are, with a sense of responsibility for the welfare of the young women under their charge, lightly cast aside all responsibility at the behest of these youthful insurgents and leave them to the heavy whacks of Dame Experience? Such a step would be to turn our backs upon the time-honored principle that plastic, inexperienced youth can learn from the hard-earned wisdom of its elders. Yet many a woman in college and high school, who finds herself in the position of social guide and moral inspirer of several

¹ *Atlantic Monthly*, November, 1920.

hundred girls, must have seriously raised in her own mind the question: how far can my advice, be it ever so understanding and sympathetic, *really change the attitudes, standards and habits of life* of a girl in her late teens or early twenties? To be sure this desired result can be and has been accomplished in cases where the woman counsellor is big enough and wise enough to inspire not alone respect but admiration and cordial liking. But the great need of these advisers at present is the coöperation of intelligent parents. Indeed the voice of the social adviser is that of one crying in the wilderness unless her efforts are prepared for and seconded by the influence and training of a good home. At least one dean of women in the Middle West has recorded her convictions on this question in no uncertain tones:

"For these young barbarians. . . . I do not believe that any satisfactory system of control can be gotten by machinery, whether of faculty, or of deans, or of sororities, or of what not. Machine work is all very well on wood or iron or linen, but it is merely a make-shift on young human beings.

"The control of college social life must begin *in the home*. And as the great Mississippi valley gets older and its people win more leisure, there will always be in it more and more homes in which boys and girls are carefully trained, in which will be anticipated those subtler points on the entrance requirements that are not expressed as languages and mathematics. . . . These homes will really relieve the university of much of its present social function, at least of its responsibility of bringing girls out into society."¹

Some readers may differ from the writer on the question of the mechanical character of existing organizations for student control in colleges and co-educational universities, but few will take issue with

¹ Breed, "The Control of Student Life," in *Jour. of A.C.A.*, December, 1908.

her in regard to the supreme importance of the home as a shaper of manners and morals—and to its indispensability. How to train girls in habits of courtesy and consideration for everyone—even uninteresting persons outside their “own set”—and how to develop in them standards of conduct that will promote and not hinder the happiness and welfare of their fellow-beings are questions uppermost in the minds of all who have to do with the social education of girls. Obviously the matter is tremendously complicated by the fact that the girl has been half spoiled by defective home training or none at all before she is sent to college. Sympathetic personal help, the wholesome influence of well-regulated college life and of bodies of self-respecting students, these will all be aids in transforming a lawless hoyden, bent on cramming as much doubtful amusement as possible into her college days—and nights—into a self-controlled young woman with a few serious interests in life. But *how much* can be done in our higher schools to offset the effects of misdirected or non-existent home training? This is the problem that confronts deans and advisers with every week that passes; and it must be admitted that it is not always viewed with confident optimism.

Control of the Social Life of College Women.—The social life of most college women is not at all lacking in social opportunities which seem all too numerous. Moreover, in relatively few instances does the modern American girl need encouragement to induce her to share in the social life of her school or college. Too often she lives in an environment of over-social stimulation and throws herself into a round of pleasures with entire abandon. Most of us will sympathize with

the dean who bewails the current practice of using the coeducational university as "a social stalking ground," where teas, dances, movies, and motor parties easily push into the background the intellectual activities still associated in old-fashioned minds with higher education. Likewise another plaint of this guardian of youth will meet with cordial response from college instructors: "The new order is very human but it is not academic, it is not dignified. It is very excessive."

In such circumstances the outstanding question is one of intelligent control rather than stimulus. But this is only to state a fresh problem. As Mr. Clarence Birdseye pointed out several years ago the modern college or university exercises little or no control over ninety-five per cent. of the students' time. This state of affairs the author believes to be necessary under a faculty of specialists and research workers. Therefore, he argues, the student of to-day receives none of that individual training so necessary to develop character. Obviously the situation is even more difficult in the coeducational university, where young men and women are thrown together in a free social atmosphere with the greater part of their time out of class hours at their own disposal. It is true that the responsibility for wise regulation of this free time is thrown upon the burdened shoulders of the dean of women and the women members of the faculty. But it is difficult to see how the former can minister single-handed to the personal needs of hundreds, even thousands, of eager, restless, young women; and, although the faculty women can do something, if they will, to build up in the minds of students saner standards of recreation and amusement, they will have to devote to this cru-

sade hours of energy and thought which many will feel should be expended in broadening and deepening their scholarship.

It has been suggested that the wives of members of the faculty might render valuable help to the crude-mannered, self-conscious, or aggressive girls or to those social butterflies who are ever fluttering about the flame of "a good time." And, indeed, "faculty wives" have not rarely been influential in helping young women to a more wholesome use of leisure. But such help must, by its very nature, be limited in scope since its results are accomplished through sympathetic individual effort with individual girls, not with groups. There are sound sense and experience in the following remarks of the dean of women quoted above:

"I am a heretic in these matters, for I do not think that taking girls by twenties in our houses and feeding them with cake and tea does much for social control. But if it were practicable for every girl in the university to be on really familiar terms with the wife of some faculty member, so that she had access to the privacy of a cultivated home and to the counsel of a cultivated woman, then there would be no problem worth discussing about coeducation, the Dean of Women might joyfully see herself abolished, and the co-educational millennium would dawn. But meanwhile, there is the awful fact of numbers."¹

If, however, we are in optimistic mood most of us will agree that the joint efforts of dean, women instructors, and faculty wives may and do accomplish worthwhile results in refining manners, in substituting other interests for the all-absorbing joys of the theater and the dance hall, and above all, in developing in young women a distaste for "the crude familiarities of

¹ Breed, *op. cit.*, pp. 66-7.

Tommy Atkins and his sweetheart" when they are in the society of young men. But college officials cannot achieve these ends alone. They must draw heavily upon the influences radiating from the saner, more serious women students, upon the regular, ordered life in university and college, and upon the call of institutions of learning to high thought and high endeavor.

The Woman's Fraternity as a Means of Social Education and Control.—Looming large among student organizations are the Greek letter fraternities. Much has been said for or against these societies, yet they continue to flourish like the green bay tree, especially in high schools and state universities. In the women's colleges, on the other hand, their star has been on the wane for more than a decade. It is interesting to find that Mr. Birdseye, in his effort to find some agency that will educate young people in a wiser use of the unsupervised time at their disposal, has hit upon the fraternity as the ideal instrument to this end. Very sensibly he points out that college students need more individual attention and training than they can ever receive in our larger centers of learning. Therefore let them join fraternities and regard the fraternity houses as their "college homes" where "each is to pass his college family life, as sacred to him as his family life at home. . . ." The seniors in these "homes" will do a valuable and much-needed work in teaching college manners and traditions to the crude under classmen. To quote Mr. Birdseye:

"The freshman will be thoroughly broken in by the firm but kindly rule of the upper classmen, backed by years of wise traditions and customs, which represent what has been best in many college generations. . . .

These traditions cover what should and should not be done and are clean and wise in well-managed chapters.”¹

Influential alumni, living in the locality, together with the seniors, must be responsible for the moral atmosphere of these homes and prevent the wrecking of a chapter by a morally weak delegation. An ideal fraternity home is, in Mr. Birdseye’s opinion, “a common-sense twentieth century substitute, through a close and wise relation of the older college man with the undergraduate, to fill the gap left by the elision of the parental relation of professor and pupil of the Ecclesiastical Period.”

An Investigation of Women’s Fraternities.—It is obvious enough that Mr. Birdseye’s glowing account of the moral value of fraternity life has its source in pleasant memories of his own fraternity days. Indeed he admits as much. But can so difficult a question as the social and moral value of fraternities be solved by any other method than that of stringent, wide, and impartial investigation? Fortunately, for our purposes such an investigation was undertaken several years ago by Miss Edith Rickert in behalf of the *Century Magazine*. The writer found that in 1910 two hundred and sixty chapters of Greek letter fraternities for women had been organized in American universities and colleges with a membership of nearly fifty thousand. She quotes a fraternity woman as declaring that the purpose of the organization is to complete individual development. “The university endeavors to graduate a student—the fraternity a significant, unselfish, gracious woman.” With entire impartiality

¹ *Individual Training in Our Colleges*, p. 307.

Miss Rickert recounts the advantages of such organizations to the fortunate young women elected to membership. They are, briefly, (1) the happy family life in fraternity houses led by a group of attractive girls; (2) the responsibility of the elder sisters "for the physical, intellectual, and spiritual welfare of the younger [who are] bound to heed the precepts and follow the examples of the elder"; (3) the beautiful and uplifting character of the ritual which links these girls together; (4) the frank, mutual criticism in the light of fraternity ideals; (5) the loyal character of the friendships; (6) the gracious hospitality of the fraternity houses to faculty and distinguished guests, a hospitality which educates girls "to preside and to receive with grace and charm, to deal tactfully with many temperaments, to shuffle guests, [in short to] become skilled in the complete art of the social game." According to the claims of its members, a fraternity girl "develops individuality and power to lead; she acquires valuable business training and womanly charm . . . and whatever the lines of service to which she may consecrate herself she will always be a success."¹

Surely this is an attractive picture and if fraternities can accomplish such beneficent results in social training perhaps deans and faculties should lend all their influence to bring about an increase in the number of these sisterhoods. But what is the obverse side of fraternity life and influence as shown by Miss Rickert? Although fraternity women deny that wealth, good looks, style, and family standing play important rôles in determining a girl's fitness to "make a frat," yet

¹ *Century Magazine*, 63: 98-99, November, 1912.

there is more than a little evidence to show that such is the case. As to the "wonderful ritual" which fraternity members are expected to live up to, the writer says she has heard it described as "childish," "poppycock," and "bunk." More temperate and convincing are the comments of a dean, who is herself a fraternity woman, on the ideals held up by the chapters: "They are not harmful, except that they are sentimental." When we examine the claim that fraternities give valuable training in household management and business affairs, again we meet with some opposing testimony. The writer quotes a dean and fraternity woman of many years standing who writes: "Usually the accounts of such an organization are not so well looked after as those of the more general women's organizations in which less of the 'family' idea prevails"; and "the business training of these undergraduates . . . is probably inferior to that gained by officers in such bodies as the Women's League, the Young Women's Christian Association, the Student Government Association, or the boards of college publications."¹

Miss Rickert next turns her attention to the claim that fraternities cultivate individuality and leadership. She finds a widespread tendency on the part of these organizations to select and develop *types*, not individuals, and cites the comments of fraternity girls to prove her point. For example: "You'd never think Caroline was a Chi Chi, would you? She ought to have been a Tau Tau." And the shrewd forecasts of a faculty member "that certain freshmen will make Gamma Gamma, and certain others Omicron Omega," is a case

¹ *Op. cit.*, pp. 99-100.

in point. Certainly the argument of the writer that "fraternities are admitted to be groups in which like seeks like, and the whole flock aims to induce greater likeness to the pattern of the group" seems eminently reasonable. What place in these carefully selected groups, whose edges have been rubbed off, is there for "the girl with a streak of genius," "the poor, proud girl [who] fears patronage" and "the dig [who dreads] missing some intellectual good thing"? As to training in leadership, Miss Rickert finds that here, as elsewhere, "it is only the few that from the first show executive and business ability who get much training in these directions through fraternity membership."

But more serious than these defects are the charges that the writer brings against fraternities on the grounds of artificiality, snobbishness, and failure to serve the general good. With respect to the first characteristic she writes: The fraternity "is artificial because it chooses and restricts friendships. Close intimacy with outsiders is almost always made impracticable by circumstances and the mutual attitude of the elect and the non-elect; and in some cases it is held to be disloyal to the chapter. It is artificial because it strives to eliminate from a girl's experience *all incongruous and hostile elements*, and these are often conducive to growth." The fraternity girl, declares Miss Rickert, "lives in the rarefied atmosphere of an artificially selected community . . . [where] she is not allowed to come to grips with all sorts of conditions and people, by which alone is gained the personal, as opposed to the group, attitude toward life."¹

¹ *Ibid.*, p. 103. Italics mine.

As to the charge of snobbishness, so commonly brought against fraternities, the writer's investigations strongly sustain it; and this in spite of the fact that fraternity women everywhere emphatically deny it. Indeed they insist that every effort is made to root out this attitude where it is found and to encourage democracy. But, as the author points out, "snobbery is the foundation-stone of the system, and when it goes, the system topples." Where groups of students are divided into fraternity girls and barbarians, into "frats" and "barbs," a social chasm exists and will continue to exist. "Where there is a gap, there is a caste, and where caste is recognized, snobbery is inevitable. When the fraternity woman disclaims snobbery, she means that she is careful not to emphasize the distinctions between herself and others." Moreover, the writer finds that the attempts of fraternities to bridge this gap do not support their claims of democracy. For example, in a recent report on social customs made by a committee of the Pan-Hellenic Society, "only three chapters mentioned any effort to be 'nice' to the whole student body." But Miss Rickert refuses to take too seriously the case of the girl who is left out. A large number of these students neither expect nor wish to "make" fraternities, and are unaffected by fraternity problems. "They have their own sets, their own social life, averaging more good times, perhaps, than they are credited with by their pitying superior sisters." As for the girl who hopes and fails to be "bid," if she "is worth saving, she saves herself in the end; and if she gives up in despair and goes home because she does not 'make a frat,' she is not of the stuff that the college needs."

Finally Miss Rickert examines the claim of the fraternities, united in the Pan-Hellenic Society, that their membership "is specially chosen and trained for service." She concludes that aside from "a vague and general interest in alumnae activities, this service is reduced to scholarships, some isolated attempts in education and philanthropy, a certain 'dynamic force' upon the character of its members, scarcely apparent to outsiders, and continued perfection of organization, thus far no more evident purpose than the reform of its own body." With broad social vision the writer concludes her articles with certain penetrating questions concerning the relation of the woman's fraternity to society at large:

"How does it stand in relation to the many needs of the world? Is it not rather like a crystallization of an immature stage of development? Why should a fraternity woman go about the world seeking only her own kind, like the missionary to China who wrote to her fraternity paper of the various social advantages that came to her through her encounters there with Greek sisters? . . . I believe that the fraternities, notwithstanding individual benefits, are hastening on our 'French Revolution'; they are creating a type that rules by habit rather than by individual power and wisdom; and by their inflexible system of caste they are emphasizing the gap, already more than sufficient for women as for men, between privilege and the working world."¹

Can the Advantages of the Fraternity Be Secured by Other Means?—These lengthy quotations seem justified because they are conclusions drawn from a genuine investigation covering a broad field, not the impressions of an individual confined to personal experience. That the college fraternity is an undemocratic institution has been conceded by most thinking

¹ *Ibid.*, p. 106.

people. Nevertheless deans and parents have long recognized the practical service rendered by fraternities in furnishing safe and pleasant homes for women students in those colleges and universities where the housing facilities are quite inadequate. No doubt this is one of the decisive reasons why they have been left undisturbed. Moreover, as Miss Rickert has pointed out, college authorities find that the fraternities can be trusted to stand solidly back of measures for student welfare and "to put things through." Then, too, many a burdened dean of women must have appreciated the practical helpfulness of fraternities in looking out for the conduct and welfare of their own members, especially of those "young barbarians" who might give trouble. Undeniably these are outstanding merits in the fraternity system which, perhaps, may suggest a way out of the difficulty of providing individual social training for the army of young women gathered in our larger colleges and universities. In those institutions where the problem of housing women students is becoming crucial, would it not be possible to experiment with the small cottage system rather than to go on building dormitories which are demonstrably unsatisfactory as a means of training individual character? Under such a plan every college woman would be housed in a comfortable home with a limited group of other students and would have opportunities for entertaining and being entertained that would serve as a natural means of social training. Miss Rickert inclines to this scheme, even while she recognizes the difficulties involved in carrying it out. The most serious of these obstacles are, of course, concerned with space and expense. The cottage system demands both more land

and more money than the dormitory system. Furthermore there are problems with respect to the successful grouping of the students and obtaining for each cottage a house-mother who embodies the rare qualities of "fine ability, tact, social distinction, and loving kindness." To secure enough women of such strong and gracious personality would be difficult indeed; and to pay them in accordance with their worth would require a larger salary fund than most colleges rejoice in. Miss Rickert suggests as a solution the selection from the graduating class of each year of young women who have had general rather than specialized training and who would be glad to give a year's time to the duties of house-mother in return for board, lodging and privileges of graduate study. Of the advantages of such a plan she writes:

"They would be near enough in age to sympathize with the undergraduate point of view, far enough away to counsel, direct and influence; and they, acting with house-committees chosen by the household of each cottage, could guide each little group in such a way as to insure a flexible system which would permit both the individual and social virtues to flourish."¹

Under such a plan it would be possible to provide for personal help and guidance of the individual students who most need it, and to furnish ample opportunities for larger group work and recreation through the various college clubs and organizations. Such a system has been tried at Smith College with satisfying results. In each cottage are housed from fifty to sixty students, drawn from all four of the undergraduate classes. The upper class students in each house assume considerable responsibility in advising the younger

¹ "Exclusiveness among College Women," in *Century*, 63: p. 232.

girls and in overseeing their conduct. The college authorities believe that such a group is large enough to enable each student to find congenial companionship, while it is small enough to permit some degree of unity and house spirit. In such a group each girl feels herself of some importance. Although no statistics have been compiled, it is believed by the authorities at Smith that the result of this cottage system is to give every student a sense of her responsibility as a member of the community. This belief, of course, cannot be substantiated without careful study of the working of the system and of its results in drawing girls into community activities outside the college walls. However, if the arrangement merely fosters friendly feeling among house-mates and draws the unsociable girl into the activities of college life it would probably justify itself. But it is a long step from the restricted, intra-mural interests of college girls, living in small towns where the importance of their doings tends to loom large on the social background, to the organized, intelligently planned community work such as is being done at Connecticut College for Women and a few other institutions. Obviously it is not safe to infer that the social interests generated in a limited and privileged group will "carry over" into the community and the nation; or that the habits developed in a restricted environment will function successfully in the widely different situations presented by a larger social life.

Social Education of High School Girls.—Hitherto the discussion of the problems in the social training of girls has been confined to the college and coeducational university. But the same problems appear in the

education of girls of high school age, with the added difficulty that these schools are more often than not located in the heart of cities which offer every allurement to young people to neglect the school for the movie, the motor-party, and the dance. Add to this the fact that the high school girl comes under school influences for only five hours daily, after which time she is free to go where she will, and the problem of the high school adviser is rendered even more difficult than that of the dean of women. For, unless she can secure the intelligent coöperation of the home, her efforts to build up in unruly girls, bent on pleasure, saner standards of conduct and an interest in social activities of some inherent worth are grounded upon shifting sands. Every high school adviser who takes her task seriously must have felt the profound discouragement which comes from attempting to work against the influences of a home where the parents are bent upon making their daughter a "social success," or where the mother is so absorbed in her own social life or family cares that she has little help to offer in overcoming the difficulties in the way of Dorothy's or Elsie's social education. First of all, then, the adviser must consider how she can win the aid of father and mother in her campaign against cheap amusements and in behalf of wholesome recreation.

Like the college, the high school also presents the problem of exclusive groups of girls whose social organizations not only fail to lead to any good end but prevent the establishment of more democratic societies that might promote growth. The sorority and the "near" sorority, as well as the exclusive literary, dramatic, and "social" clubs, spring up like mushroom

growths in our public high schools which should be, above all things else, the training grounds of true democracy. School authorities who seek to substitute for these aristocratic clubs others with a wider social purpose and membership will do well to summon all the wisdom and tact with which they are endowed if they hope to enlist the good-will and coöperation of the students in such a scheme.

But there are not lacking individuals who will say: Are there not too many clubs in the high schools as it is? Should not they strive above all things to curtail social organizations rather than to form new ones? Clearly, the answer to this question is dependent upon our belief in the importance of educating girls to be socially minded in the democratic sense and to uphold standards of conduct that promote the general welfare. If we believe that this phase of education should be intelligently directed rather than frowned upon as a nuisance we shall agree with the high school principal who says: "It is true that our pupils have been 'clubbed' to death, but it is also true that they have not been 'clubbed' in the right way." Every teacher and adviser of adolescent girls knows well that to win the loyal support of a majority in the scheme of transforming exclusive pseudo-literary societies, dancing clubs, and sororities into democratic social organizations for self-government, out-of-door sports and activities, debating, artistic photography, folk dancing, and worthwhile dramatic work is no light task. On the contrary it requires a faith in the social impulses of women, which can move mountains, together with all the enthusiasm, tact, and patient persistence of which its sponsors are capable. But if the adviser and

her cohorts win, if the transformation from exclusiveness to democracy, from selfish, empty pleasure-seeking to enjoyable social activity with a purpose, is accomplished, then they have indeed cause for self-congratulation. For they will have set the feet of these girls in the path that leads to the rational enjoyment of leisure. More than this, they will have done something toward transforming an egoistic social butterfly, who strives above all things to be "in the swim," into a human being who has some real interest in other human beings, less socially popular than herself, and who is coming to see that conceivably they have more to give her than she can give them. The improvement of the interests of leisure and the widening and deepening of social contacts through the medium of recreation are outstanding needs in the education of many American girls.

SELECTED READINGS

ALLAN, EVELYN WRIGHT, "The Unsociable Student," *Jour. of A. C. A.* Series III, No. 18, 74-78. December, 1908.

Atlantic Monthly, Articles by "Mr. Grundy" and "A Last Year's Debutante," May, 1920, and November, 1920.

BREED, MARY BIDWELL, "The Control of College Social Life," *Jour. of A. C. A.* Series III, No. 18, 60-74. December, 1908.

CHURCH, C. C., "Study of Social Pleasures in the Higher Schools," *Sch. and Soc.* VII: 229-31. February 23, 1918.

DEALEY, H. L., "Problems of the College Sorority," *Sch. and Soc.* IV: 735-40. November 11, 1916.

FERRIS, HELEN J., "Girls' Clubs." Dutton, 1918.

GEROULD, KATHERINE FULLERTON, "Reflections of a Grundy Cousin," *Atlantic Monthly*, August, 1920.

MOXCEY, MARY E., *Girlhood and Character*. Chs. VI, VII, XIII, XIX. New York, 1916.

NORTH, SAMUEL M., "A Social Program for Secondary Schools," *Amer. Phys. Ed. Rev.* XXIII: 469-74. November, 1918.

POMEROY, S. J., "The Service of the Women's Fraternities," *Ind. LXXIX*: 413-14. September 21, 1914.

"Fraternity Women," *Century*, LXV: 289-90. December, 1913.

POUND, OLIVIA, Social Life of High School Girls: its Problems and its Possibilities, *Sch. Rev.* XXVIII: 50-56. January, 1920.

"Principles of Social Conduct," Pamphlet prepared by a committee of deans of women, Florence M. Fitch, Chairman. Oberlin, Ohio.

RICKERT, EDITH, "The Fraternity Idea among College Women," *Century*, LXIII: 97ff.

"Exclusiveness among College Women." *Ibid.* 227ff. What to do about it. *Ibid.* 526ff.

TALBOT, MARION, "The Education of Women," Chs. XVII, XIX.

WESTERMAN, FRIEDA, "Social Activities for High School Girls: the Camp Fire Girls." *Amer. Schoolmaster*, XI: 433-39, December 15, 1918.

WILCOX, S., "Conduct of College Girls," *Ind.* LXXV: 320-22. August 7, 1913.

CHAPTER IX

HEALTH AND THE WOMAN

The Failure of America to Appreciate its Health Problem.—The student of educational history cannot fail to be impressed with the comprehensive way in which the Greeks envisaged the many-sided problem of education. Alone among ancient peoples the Greeks “saw life steadily and saw it whole”; and the catholicity of their mental outlook on life naturally expressed itself in their theories of education. Not only did the educative process appear to them as the development of the whole nature of man—intellectual, moral, and physical—but physical training itself was viewed with the same wholeness of vision. Therefore, bodily exercises and competitive games were conceived as means not only to the development of a healthy, vigorous physique, capable of enduring hardship in the military service of the state, but just as truly were they viewed as means to the attainment of physical grace, symmetry and moral poise. To achieve these ends, therefore, the Greeks were content to give half of every school day to physical education.

The contrast between the Greek view and that of modern America is sharp and almost complete. Until very recently our national failure to appreciate our health problem has been dismal indeed, despite the

fact that for many years a small group of educators has been urging the public to acquaint themselves with the facts concerning the physical unfitness of the American people. "In spite of marvelous scientific discoveries and achievements in the realm of health science in recent decades," writes Rapeer, "we fail generally to realize how little health and normal physical development *have been socialized and made a part of our commonwealth.*"¹ The facts when revealed are not pleasant reading. One-fourth to one-sixth of all children born in America die before reaching the school age of six years; nearly 100,000 school children die every year; and half of all who are born in any one year are in their graves before reaching the age of thirty. Nor are the facts concerning the health of our grown people more encouraging. The thorough examinations of department store women and employees of big business firms recently made by Dr. Kristine Mann and others reveal beyond a doubt that "nearly half of the workers of our indoor, city populations are low in vitality, suffer from physical defects, or harbor incipient or well-developed cases of disease." Conditions are not much better when we turn to the school population. Rapeer's studies of school children show that less than one-third in any year are free from serious ailments or remediable physical defects; and if teeth defects be included the proportion rises sharply. Such conditions lead Rapeer to the conclusion that it "would be a conservative judgment to say that on any one day of the school year at least five millions of our twenty-two million school children are in serious need

¹ "Health as a Means to Happiness, Efficiency and Service," in *Annals of the Amer. Acad. of Polit. and Social Science*, LXVII. 98, September 1916. *Italics mine.*

of vigorous remedial measures to place them in even fairly normal condition.”¹

These facts point to but one conclusion: neither the majority of educators nor the public in general are informed concerning these conditions; much less have they conceived their responsibility for them. Few indeed are the schools in America which have been built and equipped with the purpose of giving educational hygiene an honorable place among the other aims of education. To quote Rapeer once more:

“Our high schools . . . almost entirely omit hygiene, ‘how to live,’ as either an elective or required subject. Physical education and medical supervision are still in most schools conspicuous by their absence. Only a small proportion of our elementary schools teach hygiene effectively and use the better textbooks made available in the last few years. Investigations of normal schools show that student-teachers do not generally get training along this line. Hygiene is absent, even as an elective, from most college curricula, notwithstanding the fact that our people, schooled and unschooled, continue to fall by tens of thousands before typhoid, tuberculosis, and many other preventable diseases or vitality robbing defects!”²

The rude shock of war, with its unmistakable revelations concerning the physical defectiveness of even the most vigorous group of our young manhood, probably did more to arouse the American people to a sense of their shortcomings with respect to health education than all the exhortations of experts and teachers. In consequence a bill, known as the Physical Education Bill, has been introduced into both Houses of Congress. It provides for the distribution of a fund of \$10,000,000 through the State Departments of Education, each state to receive a share pro-

¹ *Op. cit.*, pp. 98-100.

² *Ibid.*, p. 108.

portionate to the number of children in the state between the ages of six and eighteen. By the terms of the bill no state would receive an amount greater than that appropriated by state and local authorities for purposes of physical education. In his advocacy of the bill, its author, Senator Capper, said:

"It has been conservatively estimated by the United States Commissioner of Education that last year, 1920-21, there was a loss of approximately one hundred million dollars in the public schools, because of absence of enrolled children due to ill health. The young people in industry under the age of nineteen that would be affected by the legislation lost through ill health last year \$71,250,000. These are only two of the readily calculable bills paid by the nation as the price of ill health and physical deficiency. If we can reduce these amounts alone by as much as ten per cent. we shall have saved more than the entire cost involved in this legislation. While we are spending hundreds of millions for battleships, I cannot but regard the proposed expenditure of ten million dollars for promoting the physical fitness of our youth as a wise and economical investment."

Neglect of the Physical Education of Women.—Nowhere has the failure of American education to conserve and develop physical health been so conspicuous as in the realm of women's education. While the reasons for securing to girls and women a sound physical development are at least as cogent as in the case of their brothers, only a fraction of the bodily training that is being given to boys and young men has, until recently, been accorded them. In a Report on Pittsburgh Vacation Schools written in 1906, the president of one of the city vacation school systems expressed himself vigorously on this matter:

"Our first sin of omission is not far to seek. It is our systematic neglect of girls. How few have looked with comprehending eyes upon the less aggressive companions of boys and seen their problem

also? Modern city conditions, overcrowding, lack of suitable places for play and for quiet normal living are more dangerous for girls than for boys. They succumb more readily to group influences. It is almost impossible to keep their modesty and self-poise in the constant mass living to which they are subject. They early lose their desire for play. We now follow the line of least resistance—give them the sweet sentimental books they like to read, encourage them to sit for hours prosaically sewing and allow them to gather in gossiping groups for the play hour, nor realize, because it all works so smoothly, that we have taken the wrong course in every particular. *Everywhere the passive, the conventional, the formal.* They will have need of bravery in the fight which is before them. Has it ever occurred to us to help them develop the sterner virtues? Have we substituted new views for the dominating emotional ones? Have we created in them the passion for a larger life and sense of the social order which gives them mental and moral poise? Have we tried to develop in them a healthy freedom and alertness of mind and body?"¹

Since this indictment was written a change has gradually been taking place in the popular attitude toward the physical education of girls and something has been done to enlarge their opportunities for gymnastic training and athletic games. The reasons for this more favorable attitude are many, but two or three are outstanding. Since the higher education of women has become a *fait accompli* in America, physicians have been pointing out that in adolescence, the crucial period of a woman's life, increasing demands are made on her for intellectual activity while nothing is done to preserve and improve her functional health, which is far from what it should be. Dr. Goldthwait, in his Shattuck lecture, has declared that the splendid work of the American school and college may prove

¹ Quoted in Dudley and Kellor, *Athletic Games for Women*, pp. 19, 20. 1909. Italics mine.

actually harmful to the race by accentuating physical weakness unless our ideas of education are enlarged to include sound bodily development. Not long ago a New York physician complained of the "crop of worn-out school-girl neurasthenics" who were received every month in the New York clinics for diseases of children. He graphically pictured the life of hurry, strain, and too great intellectual activity led by many conscientious girls who live in crowded city districts where out-of-door play and recreation are hard to obtain. Also he emphasized the fact that, during the years when most of the nervous energy of these girls is diverted to the brain, they are manufacturing new cells, building large additions in bone, muscle and glands, bringing their cerebro-spinal and sympathetic nerve systems under control, and developing a new function of enormous social importance.

Another reason why the intelligent public is more favorable to the physical education of girls than ever before is the fact that thoughtful people are coming to understand that adolescent girls need outlets for their nervous energy no less than boys if they are not to harbor unwholesome ideas and desires or nourish excessive sentimentality in "the cobwebbed corners of their minds." The gymnasium and the playing field are the best correctives of the insurgent sex impulses of adolescence yet devised—for girls as well as boys.

Perhaps the determining factor in developing an attitude of social approval of physical training for women has been and is the tremendously enlarged social opportunities and responsibilities of women which make exacting demands upon their self-control, self-reliance, and physical and nervous endurance.

No physical weaklings, undeveloped of muscle, deficient in nervous control and hampered by uncorrected bodily defects can ever hope to grapple successfully with the complicated situations of modern life as they arise in a vocation, in politics and in the give and take of strenuous social living. In consequence the minds of educators and public alike are slowly being penetrated by the conviction that women must be physically equipped to meet the strains of contemporary social life.

Recent Achievements in Health Education in America.—Since 1900 some advance has been made in this country in the health education of children and adults. The achievements of twenty years are well summarized by Rapeer:

"The playground and recreation movement has swept across this country like fire in prairie grass. Millions are spent along these lines where nickels were expended in 1900. The movement is already becoming scientific and is being standardized. Scientific health surveys of play and recreation for old and young are becoming every day more common. Likewise medical inspection, school nursing, school dental clinics, public and school baths, more sanitary school buildings with gymnasiums, sanitary drinking fountains, humidified air, scientific lighting, movable school desk-chairs, open-air and open-window schools, the feeding of school children, care in schools for mental defectives, cripples, the blind, and other unfortunate deviates, and an enormously improved health service in most cities and in many states—all bear witness to the rebirth of the physical consciousness of the race of which ages of asceticism, ignorant autocracy, and misdirected individualism almost robbed us."¹

One gratifying phase of this nation-wide movement for the up-building of health is the enactment of state

¹ "Health as a Means to Happiness, Efficiency and Service," in *Annals of the Amer. Acad. of Polit. and Social Science*, LXVII: 101, September, 1916.

laws with this end in view. During the school year 1918-19 legislation relative to health work or physical education was enacted in fifteen states. In eight of these the laws deal with health work and supervision; in six they relate to physical education; and in one state (Utah) they deal with "health education." In 1920, there were 20 states which had enacted laws providing for state-wide programs of physical education. These laws are designed to provide health work or physical education or both. The health laws, although varying in different states, provide for physical inspection, dental inspection and in some cases free dental treatment of school children, the sanitary supervision of school buildings by full-time health officers, the employment of school and public health nurses, as well as school physicians, dentists, and oculists. The laws relating to physical training enacted since 1915 are framed for girls as well as boys, and include not only physical exercises but also "normal physical examination, building up of health habits and health knowledge in general, the promotion of the ideals and the practice of healthful living."¹ If these state enactments are carried out with sincerity and efficiency and if the various officials provided for in the laws—from the state director of physical education to the school nurse and teacher of educational hygiene—are adequately trained and remunerated, this country should see, in the course of a decade or two, such a rehabilitation of the health and nervous vigor of its people as will richly repay all efforts and expenditures to this end.

¹ See *Report of the Com. of Ed.* 1919, pp. 55-61. Also *Report* 1920, pp. 68-69.

A promising coöperative movement to promote the health interests of women has been launched since the war by the National Women's Organizations. In 1920, a committee on organization, consisting of the presidents of the National Women's Suffrage Association, the National Women's Trade Union League, the National Board of the Y. W. C. A., the National Woman's Christian Temperance Union and the General Federation of Women's Clubs, worked out a plan whereby two representatives from each of fourteen leading women's organizations in the United States, together with the presidents of the organizations, were invited to attend a conference in New York City in October, to be held in connection with the final meetings of the International Conference of Women Physicians. A Committee of Seven was appointed to draw up a detailed plan to be presented at this meeting. The decision of the conference was that coöperative effort to promote the physical and moral health of women was highly desirable and the plan of the Committee of Seven was ratified. The new organization was christened the *Women's Foundation for Social Health* and its declared purpose is "to carry to the highest efficiency the social health work of the country. . . ." To this end the following principles were endorsed:

1. That health should be emphasized as a positive part of life and not only as a fight against disease.
2. That there shall be a frank recognition of the importance of emotional health as well as a so-called physical health in the education of the boy and girl.
3. That scientific data on these matters has now reached a point where it is available for lay as well as professional use.

4. That a receptive attitude toward these principles is needed on the part of lay women in order that scientific knowledge may be widely spread.

5. That the coöperative effort of all women is needed not only to carry out a sufficiently far reaching educational program but also to open up opportunities by means of which these principles may become the practical working basis of every day life. Concrete examples of such opportunities would be recreation centers, health centers, etc.

Needless to say such an awakening of women to the health needs of their own sex is a hopeful augury of educational reform in this regard only to the extent that women adopt a dynamic working program which they are prepared to carry out at the expense of time, money and consistent—not sporadic—effort.

What Should Educational Hygiene Include?—The term “educational hygiene” is here used to include not only health but physical development. One of the most encouraging tendencies in the fields of medicine, public health work, and physical education is the increasing emphasis that is being placed upon preventive measures rather than curative. Of course this is not to say that methods of remedying physical defects are neglected but rather to say that, after centuries of almost exclusive devotion to the task of effecting imperfect cures, physicians, public health nurses, and teachers of physical training are coming to the conviction that control of the sources of disease and deformity is more intelligent in method and more rewarding in results than locking the stable door after the horse has been stolen. In consequence questions of sanitation, diet, dress, fresh air, and exercise are taking their rightful place in all plans looking toward the upbuilding of health and physical vigor.

"Never in the history of the world," [writes a professor of physical education in a woman's college,] "have as many intelligent influences been at work to bar the door to disease and degeneracy, and to open the gates to health by giving to men and women every opportunity to overcome inherited weakness, to fortify themselves against the inroads of modern civilization, and to enable them to join the large aristocracy of the mentally and physically fit."

Not only are methods of preventing disease and physical defects receiving attention but it is increasingly recognized that the gap between illness and health can be bridged by individual attention and remedial exercise. The physical director in high schools and colleges can render a peculiar service by giving careful physical examinations to every girl and by obtaining her "personal history." Especially is this necessary for girls who desire to take part in athletics. A confidential relationship may thus be established between the physical director and the student which, if further developed by a régime of personal hygiene and corrective gymnastics, specially adapted to the girl's needs, should do much to create in her standards and habits of healthful living. It is probable that a rather high percentage of young women in high schools, normal schools, and colleges are in need of specialized remedial exercises to correct such conditions as defects of posture and respiration, psychic nervous conditions, derangements of the digestive organs and pelvic organs, skin troubles and defects of the feet—especially flat foot which is more prevalent than is commonly known. Until very recently the failure to give expert personal supervision to girls suffering from one or more of these defects has been almost universal and even now is very general, especially in high schools where the need is most widespread.

PROBLEMS IN THE PHYSICAL EDUCATION OF WOMEN

The Indifference of Girls to Health.—In their efforts to build up the health of the girls and young women in their charge most teachers will find a stubborn obstacle not only in the ignorance of the simplest matters of hygiene shown by many girls but also in their indifference to matters of health. After eight years of experience, the director of physical training in a girl's boarding school writes feelingly on this subject:

"That the majority of girls are ignorant of the natural physical conditions that exist in life, or even wish to know them, is plainly evident. The malady sweeps thru the land, and the artificial and the defective meet us on every hand. The absorbing and vital problem is the remedy."¹

How to combat the complacency of girls with their own ignorance of the laws of health, not to mention their willingness to flout these laws when they are known, is a knotty problem. Miss Eddy suggests two methods of attack, both of which offer some promise of success. The first is that schools shall demand that "a diploma of graduation include a certain degree of physical, as well as of mental attainment." Secondly, that educators insist upon simple, sensible, hygienic dress for growing girls on the ground that faulty fashions are responsible, to a certain extent, for physical defects. It is probably not generally recognized that the period of growth is the time when deformities are most readily acquired as well as most easily corrected. Among girls physical weakness not infrequently accompanies rapid growth, and the vital or-

¹ Jean E. Eddy, "Physical Betterment for Our Growing Girls," in *Eduo. Rev.*, 36:190, September, 1908.

gans are often thrown out of their normal position during this period, thus laying the foundation for disease. On this point Miss Eddy writes:

"The most conspicuous habits that contribute to disease are faults of form and carriage. Among them may be mentioned: dropping of the chest, causing it to be flat and narrow; rounding of the shoulders; forward position of the head; curving of the spine at the neck and waist; also a lateral curve; protruding of the abdomen, of the hips; weight upon the heels; tenseness; undue restlessness, and kindred others."¹

But faulty carriage is not the sole cause of the physical defects that so frequently characterize growing girls. Almost as important a factor are the existing fashions in dress. What person who has anything to do with the education of adolescent girls has not met with this problem and come to know it as a stubborn enemy? With some girls the adoption of the latest fad in dress seems to be the supreme interest of life beside which studies and even sports pale into insignificance. Not content with the loose, hygienic dress suitable to school girls, many young women enter boarding-schools and colleges with the inappropriate and unhygienic wardrobe of a society woman. From year to year the arbitrary demands of Dame Fashion vary; yet within a comparatively short period her votaries have been required to wear tight corsets, heavy skirts, stiff collars, gauzy low-necked waists, paint and powder, skirts so narrow as to impede walking, filmy stockings, and, above all, pointed, high heeled shoes. Not one of these semi-barbaric fashions but has its effect, great or small, upon healthful growth. So weak, if not non-existent, is the influence of many

¹ *Op. cit.*, p. 191.

parents that the responsibility for combating unhygienic fashions has fallen rather heavily upon the shoulders of the school authorities. In boarding-schools and colleges, the physical training departments have tended to insist upon simple, wholesome modes of dress, allowing for free movement and growth. The adoption of a becoming uniform in many boarding-schools shows what can be done if the school authorities will take a firm stand on this question.

In high schools the problem is obviously more complicated, since the girls are living at home under the direct control of their parents. Yet the matter of hygienic dress is so vital to the physical—and therefore to the intellectual and moral—development of girls that some way must be found by educators to meet this difficulty. Clearly this lies in the direction of enlisting the interest and help of the mothers themselves, who are often either quite ignorant of the hygienic aspects of dress or are indifferent to the matter. To secure the coöperation of thousands of homes in a campaign against unhealthful fashions is a colossal task; yet this is precisely what great urban high schools must accomplish if they are to perform their plain duty in building up the health of adolescent girls. Those high schools which are so fortunate as to boast gymnasiums, playing fields, and directors of physical training will find the problem somewhat simplified, since an astute teacher of gymnastics and athletic sports can do much toward substituting a *fashion* for hygienic dress and vigorous physique for the prevailing modes. In parent-teacher associations, also, the use of moving pictures to illustrate the effect of certain

fashions in producing physical defects as well as to create in the minds of parents a standard of appropriate, becoming dress for active girls might help on the good work.

Functional Periodicity as a Health Problem.—In view of the larger life opening to women and the serious social responsibilities resting upon them, the problem of establishing the menstrual function upon a healthy and comparatively painless basis assumes critical importance. No girl or woman who is incapacitated two days or more in every month can throw herself very effectively into a strenuous campaign for social or political betterment or carry on a vocation with satisfaction to herself or her employer. It seems highly probable that physicians and women themselves have too long looked upon functional periodicity as a time when girls should be encouraged to coddle themselves and even to indulge in what Stanley Hall describes as "sentimental instability." This is not to say that all girls can carry on their accustomed activities without modification during the menstrual period or even to deny that there is a considerable number of young women suffering from organic derangements which require careful treatment. It is only to maintain that physicians and women themselves have been all too prone to regard a normal function in most women as a "curse of Eve" in all, and to take it for granted that regular occupations, no less than vigorous bodily activity, must be laid aside or greatly reduced during menstruation. Such an attitude has had its inevitable results: painful menstruation together with nervous instability have been accepted as inescapable periodic illness, not as a health prob-

lem to be intelligently attacked like any other life problem.

The profound mistake involved in such supine acceptance of physical ailments has just begun to be perceived by a handful of physicians and physical directors. Reference has already been made to the views of Dr. Clelia Mosher, formerly resident physician at Leland Stanford University. On the basis of a study of 800 women, during a total 6,000 or more menstrual periods, she records her conviction that the chief causes of the periodic disability of women are (1) the periodic raising and lowering of the general blood pressure due to the upright posture, this condition being grossly exaggerated in the case of women by (2) physical inactivity and (3) constrictive dress. A fourth contributing cause is the idea that menstruation is an illness. With regard to the last named cause Dr. Mosher writes feelingly:

“The first step in the physical regeneration of women is to alter their habits of mind in regard to bodily functions. They now accept periodic disability as inevitable. The terms “sick time,” “unwell,” etc., for the function of menstruation and the mental acceptance of disability are so firmly fixed in traditional thinking that it is difficult to get a woman even to try to be well, however simple the method of relief offered her. . . . The first of these remedies is the removal of the factors which are producing the disability—constrictive clothing and the inactivity of the muscles of the abdomen and the diaphragm. But more important even than this is an alteration of the morbid attitude of women themselves toward this function, and almost equally essential is a fundamental change in the habit of mind on our part as physicians; for do we not tend to translate too much the whole of a woman’s life into terms of menstruation? If every young girl were taught that menstruation is not normally a “bad time” and that pain or incapacity at that period is as discreditable and unnecessary as bad breath due to

decaying teeth, we might also look for a revolution in the physical life of women." ¹

Dr. Mosher's conclusions receive interesting support from a recent study by Dr. E. H. Arnold of the effects of school work on menstruation. The subjects of the investigation were normal school students over 18 years of age. At the outset Dr. Arnold gives one of his reasons for making the experiment:

"From my experience as a physician and teacher I was convinced that much of the incapacity claimed (at the menstrual period) was of a fictitious nature, and that not only was exercise at this time not only not injurious, but on the other hand directly beneficial. It seemed to me that at this time when woman is entering fields which heretofore have been considered man's province her chance of success would depend to a large extent upon her physical efficiency, and that if this is true, as it has been taken for granted, that during her menstrual period she is more or less incapacitated, her efficiency would be lowered about one-sixth. She could, therefore, never expect to be recompensed to the same degree or considered as efficient as man in the same fields of endeavor." ²

Dr. Arnold's study comprised 238 girl students in a normal school of gymnastics in New Haven. They were required to fill out cards giving a record of each menstrual period during the school year for a period of two years. The cards asked for information concerning the number of days of menstruation, pain (mild, severe, sharp, dull,) flow, general condition (headache, etc.,) and hours of mental and physical work. Starting with the attempt to prevent students from absenting themselves from class work without due cause, the experiment gradually was extended. First, students were not excused from any *mental*

¹ *Health and the Woman Movement*, pp. 24-26. National Board of the Y. W. C. A., New York, 1916.

² *American Physical Education Review*, p. 113. February, 1914.

work at this time; next they were not excused from *all* physical work except where they were quite certain it would be injurious. The next step was to make attendance upon the less severe forms of exercise compulsory, granting excuses only in a very few special cases. "When the results from this seemed satisfactory," writes Dr. Arnold, "we determined to grant excuses for any form of exercise at this time only in special cases. At the present time the pupils take part in all the exercises at this time except swimming. . . . We have attained for our pupils that which I was convinced was possible from a theoretic point of view, namely, a nine months' course of physical training which means for each pupil really a course of nine months."

What of the results of this daring experiment? Dr. Arnold leaves us in no doubt: "Within two years . . . the student has reduced her incapacity for work during the menstrual period to a negligible quantity. . . . In the next couple of years the rise in working capacity will continue, we have no doubt, and will reach well over 90 per cent. When the working capacity of women reaches 90 per cent., their efficiency, so far as amount of work goes, is practically at par with that of man. . . . Considering the amount of work done, the small improvements shown in regularity, duration, clots, pain, etc., will take on a new meaning, namely, that in spite of an increased amount of work, not only has there been no deleterious result, but the periods have become slightly farther apart, shorter in duration and milder in pain. *We have gained the one-fifth in work which before was lost.*"¹

¹ *Op. cit.*, p. 118 Italic mine

This is surely interesting and encouraging to those who have faith in woman's powers to be and to do. And be it noted that Dr. Arnold's conclusions were arrived at not by the facile method of empirical opinion but by a careful experiment carried on with a considerable number of young women over a period of two years. However, it need hardly be said that one such experiment is not conclusive evidence. Many more tests involving much larger numbers of young women and a well-planned system of "following up" tests must be made before any confident conclusions can be drawn. Unfortunately, so firmly rooted is the notion that physical exercise is harmful during menstruation that in the author's knowledge no physical director has been found courageous enough to attempt a similar experiment and publish his results. Thus the whole question remains an unsolved problem and many thousands of women at present continue to regard themselves as incapacitated for serious work during a portion of every month. Until this handicap is removed women will labor under a disadvantage in all activities which bring them in competition with men.

But the functional health of the American girl is important not alone as a means to an active and useful life but also because she is destined to be the mother of the future generations. The perfecting of the sexual organism of young women is, obviously, Nature's supreme task; and yet for untold centuries the function most intimately connected with healthy motherhood has been a *noli me tangere*. Under a historic taboo, menstruation has not been the subject of that scientific investigation which must guide all efforts

toward functional improvement. It is not strange, then, that the effects of mental or physical overwork upon the healthy maturing of the sexual organism of girls is just beginning to be understood. Only within recent years have physicians and teachers recognized any connection between sterility or still-births on the one hand and excessive mental strain in the early years of adolescence on the other. The critical period in a girl's life falls earlier than has been supposed—between the ages of ten and fifteen. During these years preparation for the menses must be laid in hygienic habits and out-of-door play and sports. After menstruation sets in, too much care cannot be taken to establish it with regularity and so far as possible to render the function painless. The nervous strain felt by some girls in meeting the requirements for entrance into the high school and in maintaining a good standing after getting in is a serious drain upon their functional health and should be avoided at all costs, even at the expense of another year in the grades or the high school.

THE QUESTION OF SEX EDUCATION

Is Sex Education Necessary and Desirable?—The urgent need for an enlightened public opinion favorable to sex education of girls and boys has long been apparent to physicians and social workers. In 1905 was organized the American Society of Sanitary and Moral Prophylaxis, having as its avowed end a "social defense against a class of diseases which are most injurious to the highest interests of human society." This organization was the forerunner of a long line of Social Hygiene Societies which sprang up in various

localities throughout the United States during the next eight years. In 1913 two of the most important of these associations were united in the American Social Hygiene Association with its headquarters in New York City. The primary purpose of all these organizations has been to educate the public mind to an appreciation of the prevalence and the dangerous character of the social diseases and to arouse it to the need for education of the young in sex hygiene and sex ethics. Thus the movement for sex education, as Dr. Maurice Bigelow has pointed out, started as "sanitary propagandism," based upon certain indisputable facts of sanitary science, and tended to emphasize "physical punishments for immorality rather than (to) offer ethical and psychical rewards for morality."¹

It is not surprising that these early movements were attended with much sensationalism and that the interest of the public tended to focus upon the more startling and abnormal phases of sex life. But already evidence is accumulating that a reaction has set in against the over-emphasis of certain writers upon sexual degeneracy and in favor of a constructive attack upon the problem of sex education. In the words of Dr. Bigelow, one of the leaders in the social hygiene movement:

"The wave of sensational revelation has passed; but the intelligent public is no longer ignorant of the nature and causes of the great problems of sex, and is well aware that young people need definite guidance for facing the facts of life. It is unthinkable that intelligent parents who are now well informed concerning sex will ever again stand for the old policy of mystery and silence."²

¹ See Bigelow, *Sex Education*, pp. 228-33.

² *Op. cit.*, p. 234.

Beyond doubt many parents have been awakened to a sense of the stupidity and harmfulness of the ancient taboo upon frank discussion of the facts and problems of sex. Yet there is ample evidence to show that large numbers, perhaps the majority of parents, are not thus enlightened and still cling to the theory that girls should be left entirely "innocent" of sex knowledge, even though it may be advisable to give to boys some information concerning the awful penalties for sexual promiscuity. Such parents have, in most instances, quite forgotten the dubious sources from which they acquired their own sex knowledge at an early age. There is good reason for believing that the "innocence" (meaning ignorance) of most girls is a myth and that a large majority of even carefully nurtured girls have "picked up" the essential information about the facts of life before they were fifteen years old. It is, of course, the fact that the first sex knowledge of many girls comes from corrupt sources, which inevitably color their attitudes and feelings toward sex matters in harmony with its own vulgarity, that constitutes the strongest argument for a sane sex education of girls. Parents and educators must decide, then, whether they will assume responsibility for wholesome sex instruction of youth or will "continue to permit childhood to gain its information from corrupt and foul sources, from erotic literature, or from the evil traditions of the gang."

Unquestionably the reluctance of many parents to sanction the sex education of their daughters is due to a fear, more or less well-grounded, that such instruction might stir up dormant sex curiosity and sex feeling and thus do more harm than good. Another

cause for reluctance lies in their anxiety lest frank sex instruction might give a profound and unpleasant shock to sensitive girls from the effects of which they might never wholly recover. Obviously if sex education is to be introduced into schools and colleges the methods of instruction must be planned with the utmost care in the light of biology, adolescent psychology, and the social environments of the students.

Suggestions for a Plan of Sex Education.—The problems arising out of various attempts to put into operation a practical program of sex education have been discussed for several years and certain conclusions appear to have been agreed upon by leading educators identified with the movement. First, it seems clear that sex education should be looked upon as an integral part of general education and should not be sharply separated from it as has been done in the past. There is grave danger in isolating sex facts and problems for special consideration, at least before adolescence, that these may assume too prominent and unrelated a place in the minds of children. The ancient ban laid upon all reference to sex matters in the direction of girls has caused teachers to ignore or slur over such references in literature, history, the social sciences, and even nature study. And yet in these, and other studies, are rich opportunities to discuss frankly and critically such sex questions as arise and to help girls to acquire standards and ideals with regard to sex relations in social life. Dr. Bigelow has suggested the *Idylls of the King* as containing a mine of valuable literary material centering about problems of love. These, in the hands of skillful and idealistic teachers, might well contribute to a better understanding of

the true relations of the sexes in a civilization which has passed from the brutal to the spiritual. The same holds true of history, ethics, and sociology. When taught by trained and large-minded teachers, the possibilities of these subjects for furnishing sex information and developing wholesome sex ideals are rich and varied.

But it is pretty generally agreed that the subject of biology furnishes the best foundation, in pre-adolescent years, for a subsequent understanding of the facts of life in the human sphere. A candid and scientific study of reproduction in plants and animals is the best possible approach to a similar study of human reproduction in the years between fourteen and eighteen. Probably all the sex knowledge a carefully brought up girl needs before puberty is such information as she may obtain in a well-planned course in elementary biology or "nature study," together with such facts as her mother may deem it wise to give her.

And here we come upon several questions that must be briefly considered. Girls before puberty, in the years from ten or eleven to thirteen, need certain guidance and information to protect them against the vulgar conversation of their playfellows, as well as against harmful sex habits. Almost universally in the past parents have shrunk from giving this knowledge and help and, ostrich-like, have thrust their heads into the sand, believing that they might avoid all difficulties by not facing them. Therefore, advocates of sex education have come to see that their first concern must be with the parents themselves. Unless their uncritical allegiance to the age-old ban upon sex knowledge can be broken down; unless they can be interested

in acquiring the necessary information as well as the best methods of imparting it to their girls when it is needed, the schools will be seriously handicapped in all that they attempt to do by way of sex education. Consequently, the education of mothers and fathers, through parent-teacher associations and special meetings to consider the problems of sex education at different periods of child-life becomes essential. Such education would not only give information to parents; it would awaken them to the profound importance of keeping the confidence of their children by frank and honest replies to such questions as they may ask. The mother who has failed to foster a spirit of trust and mutual understanding between herself and her daughter has lost a very precious thing, almost impossible to reclaim; and this loss will make her efforts to give sex enlightenment and guidance both more difficult and less rewarding. Some, mothers, at least, need to be reminded of this fact and helped to find the best ways of holding their daughter's confidence.

In the years before puberty girls should be told the essential facts about the human reproduction and should be prepared by their mothers for the physiological changes which take place at puberty. There are few intelligent adults who do not know instances of harm wrought to sensitive girls by withholding from them all information concerning the menstrual function until its first appearance. The meaning and the hygiene of menstruation should be explained to every girl by her own mother, who can best surround this function with the dignity and social significance which is its due. At the same time she should avoid all sug-

gestion of menstruation as an illness or an infirmity of sex.

After puberty, educators are agreed that the girl is ready to build upon the foundation of biological knowledge gained in school and on the elementary facts of sex learned at home a superstructure of more advanced sex knowledge and understanding. In the last year of the elementary school and during the four years of high school girls should be given, in biology or hygiene courses, more scientific and detailed instruction concerning sexual structure and the facts of human reproduction. The introduction of this more advanced sex education into the eighth grade of the public schools seems justified by the fact that a large number of girls will go to work after finishing the elementary course. Indeed it seems hardly open to doubt that sex instruction should be given to those large groups of girls who seek to obtain their "working papers" as soon as they have reached the legal age for leaving school, although they may not have completed the sixth grade. No informed person can deny that girls in trade and industry are exposed to peculiar dangers and temptations against which neither the school nor the home has in most cases seriously attempted to fortify them. To these girls as well as to those in high school should be given scientific information concerning the names and function of their sexual organs. Biologists are no doubt correct in maintaining that a frank, scientific approach to these matters, coupled with the use of the scientific names for sex organs and functions, does much to dispel earlier vulgar associations and to develop in girls a much-needed scientific attitude toward questions of

sex. Dr. Bigelow suggests the following topics in sex physiology as important for girls to know between fourteen and sixteen or eighteen:

"The meaning of puberty as the beginning of a long fertile period of about thirty years; the nature of menstruation as a periodical process preparing the lining of the uterus for reception and attachment of an embryo if a sperm-cell meets a liberated egg-cell near an ovary, and not a season of illness invented by the powers of darkness; the possibility of fertilization following sexual relations at any time during the fertile life of a woman; the essential facts of sexual relation as a method of depositing sperm-cells so that they can swim on the way to meet an egg-cell; and the nature of the close blood relationship of mother and embryo."¹

In the reaction against an over-emphasis upon the grim results of sexual promiscuity, with its attendant venereal diseases, educators are coming to doubt the value of giving carefully nurtured girls under eighteen anything more than the essential facts of the existence of prostitution and social diseases. But it seems plain to the writer that young women of seventeen and over should receive enlightened guidance in understanding the difficult problems growing out of romantic love and marriage. Girls need to develop a more serious and idealistic attitude toward love between the sexes and to comprehend far more clearly than most of them do the difficult adjustments to be made in marriage if it is to be harmonious and satisfying. Furthermore, young women should be made to understand that they cannot escape a measure of moral responsibility for the sexual conduct of their men friends and acquaintances. Physicians and educators have accumulated a depressing body of facts which show that girls who dress so as to expose their bodies, who dance in close

¹ *Op. cit.*, pp. 153-54.

physical contact with men, and who carry flirtation to its extreme limits, have so aroused the sex passion in their young men associates that these youths have over and over again sought the prostitute as an outlet for their inflamed sex impulses. These are not pleasant facts; but it is the merest prudery, as well as selfish denial of women's responsibility, for parents to object to their daughters being informed of the truth. In the days of chivalry the fair flower of courtesy was in a very special sense placed in the guardianship of women. To-day, as then, the finer standards and ideals of sex relationship must be upheld chiefly by women whose task it is to lead men to an enlightened acceptance of them.

The Need for Playgrounds and Athletic Fields for Girls.—When American public opinion became tardily convinced of the value of physical training for boys and girls the gymnasium was included in plans for the better types of school buildings. However, although school gymnasiums have spread rapidly throughout the country, Curtis estimates that in 1915 they served less than five per cent. of the children of school-growing age. Moreover, gymnastics, valuable as they may be, are probably too formal in character to meet the needs of individuals who require both exercise and recreation. Writing on the shortcomings of gymnastics Curtis says:

"All systems of gymnastics have been developed for the purpose of military training. Their purpose is to create muscular strength. Gymnastics, thus far, have not met the physical needs of Americans and they probably never will. . . . Gymnastics are an unnatural form of exercise. Take the pulley weights, as an example. The motions involved have never been required in human history: They are uninteresting and soon become a bore. . . . They are physical

exercise, but man has never before had physical exercise (as an end). He has sought to accomplish certain results, and both physical and mental exercise have been incidental to accomplishment. Gymnastics are mostly indoors, where the air is not the best, and so far as they are done at word of command, the strain of voluntary attention is nearly or quite as great as that of the classroom. Many of the muscular movements involved are of the accessory kind."¹

This, of course, is not to condemn gymnastics but merely to point out their limitations. In the fall and spring when the weather is most beguiling, there is real need, especially in crowded cities, for playing fields for boys and girls. Because girls have, up to the present, been both more passive and more secretive than boys, parents and teachers have by no means realized how much they are in need of the vitalizing, morally tonic effect of organized play and sports out of doors to free their minds from unwholesome curiosity, sentimental notions, and foolish conventionality. The President of the Pittsburgh Playground Association, after declaring that when a girl she had been "almost transformed by a season of basket ball and tennis," adds: "The playground can have no more vital and important mission than the substitution of healthful, bracing, character-building play for the idleness and enervating amusements of these future mothers of sons. When we have a race of women pure-hearted, large-hearted, and brave, we shall not need to be concerned about the social evil."²

Although the playground movement has swept the country during the last ten years and almost every large city from Boston to San Francisco points with

¹ *Education through Play*, p. 20.

² Beulah Kennard, *What the Playground can do for Girls*, in Russell Sage Foundation, Department of Child Hygiene, No. 4, p. 8.

pride to its fields for games and sports, few who know of the extensive need for these recreation grounds, of the thousands and thousands of girls and boys not yet provided for, will be satisfied with what has been accomplished. Not only are more playing fields needed, but better equipped ones, with better trained physical directors and teachers, paid from public funds. Such men and women would understand not only how to organize sports and games for all children, suited to their interests and physical condition, but how to develop through these sports working standards of wholesome recreation, of good sportsmanship and honesty, which would help to combat the unwholesome and vicious allurements of large cities.

Should Athletics for Girls be the Same as for Boys and Men?—Athletics for girls have scarcely passed out of the stage of infancy at the present writing. Mid-Victorian ideals of a delicate "female," worshipping at the shrine of the conventions, are chiefly responsible for the tardiness of their appearance. But it can hardly be doubted that physicians, by applying judgments of physical unfitness derived from treating feeble and sickly women to the entire sex—healthy or unhealthy—have played their part in retarding the progress of athletic training for girls. Now that colleges and some high schools, as well as Public School Athletic Leagues and Playground Associations, are making athletics for girls quite respectable, the question arises: What sort of organized sports shall we sponsor for girls? In the past, of course, athletics have been the prerogative of men and have probably served the dual function of recreative sport and an outlet for men's inherited fighting instinct. Miss

Burchenal, formerly of the Public Schools Athletic League of New York City, declares that competitive athletics "have evolved from the primitive pursuits and activities of men—not women." Because "woman is the product of a different physical specialization" from that of men the writer regards any attempt to foist men's athletics upon girls and women as illogical. Moreover, except for a small percentage of healthy, muscular girls of superabundant energy, she believes that most young women find very little appeal in men's athletics. Therefore she urges that directors of physical education "break away entirely from the idea that in order to have athletics for girls we must approach the subject from a man's point of view, and . . . evolve (their) own individual, natural sports regardless of whether or not they coincide with those of men."¹

The differences in build of the typical woman and of the typical man have frequently been pointed out by physicians. Especially have these been emphasized by Dr. Sargent, who has shown in terms of mechanics that certain athletic exercises popular with men are performed with great difficulty even by girls of extraordinary muscular development, while such exercises are impossible for the majority of young women. The structural differences between the sexes are beyond question and in themselves would seem to necessitate modifications of men's athletics to adapt them to women's physique. But this is not all. Teachers and directors of physical education have for some years been sounding notes of warning against men's ath-

¹ *Athletics for Girls* in Russell Sage Foundation, Department of Hygiene, Vol. I, No. 37, pp. 7, 8.

letics for girls on the ground of the evil effects of these sports both physically and mentally. Women themselves, in adult life, trace certain internal derangements from which they suffer to their too vigorous efforts to win distinction in men's athletics. Miss Burchenal quotes two such cases as follows:

"By my continued practice of high jumping, vaulting and other violent exercises, I was injured internally, and I know of several others who were also."

And another writes:

"I have felt that my internal derangement was caused by my violent physical exertions. You probably remember my wild ambitions. But besides that, I feel very strongly that I sapped my strength and vitality to a degree from which I never have and never shall recover."¹

It is a disagreeable fact which must, nevertheless, be faced that a large proportion of girls enter high school in poor physical condition, partly owing to inherited weaknesses which have not been corrected, partly to unhygienic living and too little out-of-door exercise. A teacher of physical training for girls recently declared that in looking over her high school enrollment of three hundred and fifty girls she found the names of only fourteen that she considered really strong and vigorous. Certainly, if such conditions are general in our urban centers, the rules and conditions of men's athletics should be materially modified to suit the needs of weak and physically undeveloped girls. And such adaptations appear to have been very generally made.

¹ Burchenal, *op. cit.*, p. 10.

Honors and Incentives in Competitive Games. — There prevails a very general opinion among teachers of physical education for girls that the stimulus of competition and rewards is necessary to induce girls in large numbers to enter the field of athletics at all. In many high schools only one hour a week is required in physical training—if any requirement is made. That throws the entire organization of competitive sports into the hours after school work is finished and makes participation in such sports voluntary. This fact accounts in some measure for the competitive character of girls' athletic games; for in this way a powerful appeal is made to a fundamental instinct, and interest is thereby aroused to a high point. Tradition also plays its part, since boys' athletics have been competitive from the days of the ancient Greeks. To the powerful incentive of success in competitive games is usually added a system of honors, both team and individual, which still further whets the interest of girls in organized sports and lures them on to undergo more or less exacting training and hygienic discipline. The system of honors quite commonly employed includes the donation of a trophy to a successful team and of class numerals, school letters, and a school sweater to individual girls who win a stipulated number of honors in athletic contests, prescribed exercises on the horse, rings, horizontal ladder, etc., track and field events, and swimming.

In the opinion of not a few educators the strong emphasis laid upon competition in sports and the use of honors as rewards has been excessive and productive of undesirable results. Too many girls (as well as boys) have played to win, not for fun, or to

achieve personal distinction, not to serve their team. Moreover, the nervous strain inevitably accompanying intense competitive activity is recognized by many physical directors as a dubious, if not positively harmful, by-product of athletics. Certainly the question of keeping the competitive instinct within bounds, in the interest alike of social ideals and of nervous health; and the further question of educating girls to play, first and foremost for the fun of the game, not for personal or team honors, are practical problems for every teacher of physical education to consider.

Should Inter-Scholastic Athletics be Encouraged?—

The above discussion opens the way directly to consideration of the much-debated question concerning the advisability of inter-school or inter-college athletics for girls. There has developed within the last ten years a body of opposition to extra-mural competitive games so formidable that it bids fair to break down the weakening defenses of those physical directors who still maintain that such intense competitive activity is necessary to stimulate girls to undergo stiff training in athletics and to keep active their interest in sports. Dame Experience is notoriously a thorough, if somewhat drastic teacher, and she appears to have driven home to the minds of a growing body of teachers of physical training that inter-collegiate or inter-school athletic contests are attended with definite, unpleasant results which appear to be somewhat enhanced in the case of girls. In the first place the nervous strain of any competitive game is tremendously increased when two different schools or colleges are pitted against each other. Secondly, such competition tends to develop the “win at any

cost" spirit. In the words of a director of physical training of long experience: "girls show this spirit not so much by trying to win by unfair means as by using up all of their strength and nerve force, until they break down emotionally when the game is lost." It may be argued that such emotional instability constitutes an important reason for educating girls to be "good losers"; but the opposition replies that there is ample opportunity to develop this valuable moral quality in intra-mural games, where the competitive instinct is quite active enough for all practical purposes. Another criticism of inter-scholastic contests has to do with the time and expense involved in travel to other localities which alone are regarded by some educators as sufficient to condemn the system. As this question will be considered later in recording the replies received to a questionnaire, it will not be discussed further at this point.

Do the Social and Moral Values of Athletics " Carry Over " into Life Situations?—On the question of the social and moral qualities developed by organized sports there is a truly impressive unanimity of opinion. Team and group loyalty, self-subordination, co-operation, sportsmanship in victory and in defeat, fair play, courage, perseverance, temperance, and responsibility —these are some of the virtues which teachers of physical education confidently claim are the much-to-be-desired outcomes of intelligently supervised athletics. And there is solid evidence to support these claims when they are restricted to the conditions prevailing in the gymnasium and on the playing field. But when educators categorically declare that these desirable social qualities unquestionably "carry

over" into life situations presenting different elements, they at once pass to debatable ground. Such a statement as the following seems reasonably open to doubt in the light of recent psychological investigations into the extent and degree of "transfer of training."

"It is evident that the training obtained through athletics is carried over into the business and social life after the girl leaves school. Other things being equal, she is ordinarily a fair competitor and better citizen. The responsible, reliable player becomes the same kind of a citizen, *for in games moral energy is stored up and habits established which govern the activities in later life.* The girl who has learned through the experience of games not to do unfair things under the stress of competition has had the training which enables her to face temptations later in life where the stakes involve large interests. . . . The girl who was unfair and intemperate in games carries these same qualities over into her social or business world and everyone who lives or works with her is affected by them. The girl who failed to do team work or refused to play games at all continues an individualist in her later activities. *Whatever is acquired of good social and moral qualities is taken into the home and tends to raise the home standard and so affects the community in a broad way; . . . Modern civilization is complex, strenuous and often artificial and our system of education needs organized games to prepare the girls for organized life and its activities.*"¹

It is quite probable that an overwhelming majority of teachers of physical training who read this declaration of faith would whole-heartedly agree with its professions. On the other hand the educator at all familiar with the results of present-day psychological experiments is moved to exclaim in the quaint words of John Locke: "I could wish this were said with as much Authority of Reason as it is with Forwardness of Assurance, and that this [theory] were

¹ Dudley and Kellor, *Athletic Games for Women*, pp. 37-38. Italics mine.

established upon good Observation more than old Custom." Nothing is easier than to declare with conviction that the "responsible, reliable player becomes the same kind of citizen, for in games moral energy is stored up and habits established which govern the activities in later life"; but such a statement reveals an ignorance of contemporary psychology that would be mildly amusing if it were not productive of harmful results. It is not too much to say that there is scarcely a clause in the above quotation that would not be qualified or challenged by any reputable psychologist. If the psychological research of the last two decades has served to make anything in the field of mental activity reasonably clear, it is this: that mental functions or traits are not general in character but specific; therefore the training of any mental function in one set of circumstances (or with one set of data) is no guarantee that the function will work equally well in a different situation involving different elements. To quote Professor Thorndike:

"By doubling a boy's reasoning power in arithmetical problems we do not double it for formal grammar or chess or economic history or theories of evolution. . . . The gain of courage in the game of football is never equalled by the gain in moral courage or resistance to intellectual obstacles."

This is not to say that there is no transfer of improvement in function to another set of circumstances, but only to ask how much. Psychological experiments conducted over a period of twenty years lead expert psychologists to the conclusion stated by Thorndike:

"The very slight amount of variation in the nature of the data necessary to affect the efficiency of a function-group makes it fair to infer that no change in the data, however slight, is without effect

on the function. The loss in the efficiency of a function trained with certain data, as we pass to data more and more unlike the first, makes it fair to infer that there is always a point where the loss is complete, a point beyond which the influence of a training has not extended. The rapidity of this loss . . . makes it fair to infer that this point is nearer than has been supposed."¹

Obviously, when these statements are translated into terms of the moral and social training gained through athletic sports they mean that, while such training is by no means denied, the transfer of improvement from the playing field to the every day situations of business, home, social activities, and politics involves a loss so great as, in some instances, to make the influence of the training negligible. Because a girl coöperates in team-play there is, unfortunately, no assurance that she will coöperate effectively in a movement to secure better housing conditions for workers, or to enforce the civil service regulations, or to provide better educational facilities for all children. Because she has developed a spirit of fair play in sports is no guarantee that she will be fair in business or professional competition or in political party strife. To repeat, this is not to say that ideals of fair play, disinterested team-work, and good sportsmanship in winning and losing will not "carry over" from the athletic field into the widely different circumstances of the workshop, the office, the drawing room and the political campaign, but only to maintain that there is a loss in the efficient functioning of these habits and standards directly commensurate with the difference in the character of the two situations. Moreover, as Dr.

¹ Thorndike and Woodworth, "The Influence of Improvement in One Mental Function upon the Efficiency of Other Mental Functions." *Psy. Rev.*, 8. 250.

Jesse Williams has pointed out in a recent thoughtful article, self-control, self-subordination, fairness, and loyalty to the team are learned even in the gymnasium and athletic field "*only if the response made to the situation is followed by a satisfying state of affairs.*" That is to say, these ideals and habits are acquired by individuals only if the officials of the games hold up standards of fair play, self-control, etc., and enforce them with strict impartiality so that the players are not penalized for exhibiting these qualities by losing the game. If they *are* so penalized the psychological bond between a provoking situation and the desired response is positively weakened, not strengthened.¹

The moral responses which the right-minded teacher of physical training seeks to call out may be developed into moral and social habits on the playing field. But more than this, if these specialized ideals are *generalized* by being applied to social situations there will unquestionably be some transfer of these ideals into the daily affairs of life. How much depends upon circumstances. Studies are greatly needed of the after lives of men and women, distinguished in school and college by their proficiency in athletics, with a view to discovering whether these individuals were marked above others in their community by their self-control, public spirit, and willingness to coöperate in as well as to lead unpopular causes for the common good.

A Questionnaire on the Physical Education of Girls.²

—During the year 1921 a questionnaire was sent out

¹ "The Education of Emotions through Physical Education," in *Teachers College Record*, May, 1920, pp. 205-8.

² See appendix for full statistics.

to 120 high schools in the larger cities of the country and to 100 colleges and universities educating women. Replies were received from 44 high schools and 61 colleges and universities. The findings in detail are set forth in an appendix and throw interesting light on present conditions and theories in regard to physical education for girls. There is surely cause for encouragement in the fact that nearly all the colleges and high schools reporting employ a physical director and require from one to four years of physical training of every girl. Not so heartening, however, is the knowledge that only one-half of the high schools require physical examinations of the girls and a few of these examine only selected groups; while considerably over half of the high schools reporting do not take the personal histories of the girls. The record of the colleges is distinctly better in respect to both these points and the same holds true of the prescription of remedial exercise. Whereas more than five-sixths of the higher institutions prescribe these exercises whenever needed, or in a limited number of special cases, less than three-fourths of the high schools so employ them and nearly half of these schools only in a very restricted way. Again, with respect to measures for securing painless menstruation the colleges make a far better showing than the high schools. More than three-fourths of the former have adopted approved measures for helping girls to obtain normal menstruation, while only *one-third* of the high schools are giving attention to this matter. And yet the establishment of functional periodicity upon a healthful basis is, beyond question, one of the most serious problems in the physical education of adolescent girls and should by

no means be deferred to the period of college training, which only a limited group will ever enjoy.

When we turn to the question of the instruction of girls in sex hygiene the advantage remains markedly in favor of the colleges and universities. This difference may partly be explained by the fact that the high schools are wholly public institutions, while the colleges are not. The conservative attitude of the great body of our middle class toward the removal of the taboo upon intelligent discussion of sex questions needs only passing reference. Yet, it may be said, the ban is being lifted in state universities supported by public funds. This greater liberality of attitude in our higher institutions of learning is probably due to the fact that the parents who send girls to college are themselves more enlightened and progressive than the majority of middle class men and women. Moreover, the girls are more mature and doubtless parents feel that sex knowledge will not be so likely to shock their sensibilities or engross their thoughts. But whatever the explanation of the disparity, the injustice involved in withholding from girls of high school age enlightened sex instruction and guidance at a time when they need it probably more than in any subsequent period of their lives, is undeniable and is a signal instance of the short-sightedness of educators and of the public.

It is interesting to note that a large majority of high schools and colleges believe that girls' athletics should not be identical with men's. Indeed only one university and one high school favor the use of men's athletics without adaptation. Not so nearly unanimous, however, is the disapproval of inter-scholastic

sports for girls, although many schools and colleges advocate such games only under careful regulation and oversight. The general belief in the transfer of moral training from the gymnasium and playing field to the varied and different situations of business and social life is difficult to explain if physical directors are well informed in current psychology. Certainly the replies revealed clearly enough that the belief is grounded largely on opinion and a limited experience, since no director stated that she was using a careful plan of "follow up" work with her students.

The results of the questionnaire, limited in scope as the investigation admittedly was, have some value as evidence that our colleges and universities, at least, have awakened to the necessity of a broadly conceived policy of physical education for women—a policy that shall provide not only for muscular development but for the upbuilding of hygienic habits, the removal, so far as possible, of bodily defects and disabilities, the equipment of the woman with sex knowledge and ideals, and the development of standards of sportsmanship. So far as it goes, the questionnaire further reveals how far the high schools lag behind the colleges in respect to breadth of policy and degree of accomplishment in the physical education of girls.

SELECTED READINGS

"A Coöperative Health Movement," *Jour. of Assoc. of Coll. Alum.*, XIII, No. 3, January, 1920.

ARNOLD, DR. E. H., "The Effect of School Work on Menstruation," *Amer. Phys. Ed. Rev.*, February 1914, pp. 113-129.

BIGELOW, MAURICE, "Sex Education," pp. 153-5, 228-234.

BURCHENAL, E., "A Constructive Program of Athletics for Girls," *Amer. Phys. Ed. Rev.*, May, 1919, p. 272.

"Athletics for Girls," *Russell Sage Foundation*, Dept. of Child Hygiene, Vol. I, No. 37.

CRESSMAN, ANNA S., "A Plan of Athletics and Honors for High School Girls," *Amer. Phys. Ed. Rev.*, XXII: 420, June, 1917.

CURTIS, HENRY S., "Education through Play," pp. 1-42, 1915.

DUDLEY, GERTRUDE and KELLOR, F. A., "Athletic Games for Women," pp. 1-40, 70-75. 1909.

EDDY, JEAN, "Physical Betterment for Growing Girls," *Educ. Rev.* 1908, pp. 190-94.

KENNARD, BEULAH, "What the Playground can do for Girls," *Russell Sage Foundation*, Dept. of Child Hygiene, Vol. I, No. 4.

KENNEDY, DR. HELEN P., "Effect of High School Work upon Girls during Adolescence," *Ped. Sem.*, III: 469-82, June, 1896.

MANN, DR. KRISTINE, "The Hygiene of Women's Colleges," in RAPEER, *Educational Hygiene*, Ch. XXXII.

MOSHER, DR. CLELIA, "Health and the Woman Movement," National Board of the Y.W.C.A., New York, 1916.

Proceedings of the N. E. A. 1915, 1916.

1. "A University Playground for Women," pp. 975-978. 1915.

2. "Health of College Women," pp. 691 ff. 1916.

RAPEER, L. W., (editor), "Educational Hygiene," Ch. I. 1915.

—, "Health as a Means to Happiness, Efficiency and Service," *Annals of the Amer. Acad. of Pol. and Soc. Sci.*, LXVII:98-105, September 1916.

WHITTAKER, NELLIE C., "The Health of School Girls," in *School Review*, 1908, pp. 391-400.

SOMERS, FLORENCE A., "The Right Kind of Athletics for Girls," *Amer. Phys. Ed. Rev.* Vol. XXI: 369-75, June, 1916.

TALBOT, MARION, "The Education of Women," Ch. XVIII. 1910.

WILE, IRA S., "Sex Hygiene and Sex Education," RAPEER, *Educational Hygiene*, Ch. XXIX.

WILLIAMS, DR. JESSE, "The Education of Emotions through Physical Education," *Teachers College Record*, May, 1920, pp. 205-8.

CHAPTER X

VALUES IN EDUCATION

Significance of the Term “Value.”—The educational literature of the present age—of which, be it said, there is no dearth—abounds in references to educational values. But these are too often conceived as goods external to the self and therefore to be consciously striven for as the objective goals of education. In this sense writers discourse of social efficiency, discriminating enjoyment of literature, æsthetic appreciation, as ends or values existing apart from the individual learners and won only by serious application and sustained effort along the paths marked out by the schools. This conception of values lays itself open to the criticism that it substitutes “pompous and sonorous generalities” for intimate personal experiences—an error by no means confined to education. Yet a few moments’ thought would convince any intelligent person that a value does not exist except as some one’s appreciation of good. Enjoyment of fine art, for example, cannot be attained merely by setting it up as an essential ingredient of culture to be acquired by diligent practice in drawing and painting. It is idle to discourse to girls about æsthetic and moral worths and their primary importance in a liberal education, unless these can be translated into personal appreciations of value, in other words into the

enhancement of the individual life, emotionally and intellectually. The student does, to be sure, sooner or later acquire the notion that educated people set the stamp of approval upon these appreciations and that they are indispensable elements in that vague thing called "culture." Therefore, if she is docile and amenable, she will seek to add them to her educational stock in hand. But, if the early experiences of this girl have been gained in a home where crude and brilliant lithographs and Rogers statuettes set the standard of fine arts, and if she has actually come to prize these as giving her enjoyable feelings and ideas, she will, in spontaneous moments, turn from her artificial school standards to those things which she really appreciates. How to transform mere concepts of value into living appreciations, deepening and broadening the meaning and intensity of life, becomes, then, one of the paramount problems of education. And the way out would seem to lie, as Professor Dewey has so convincingly shown, in providing a variety of direct experiences of art, literature, music, intellectual activity, moral and social relationships, from which girls and boys may get a "realizing sense" of the values inhering in them!¹

Values in Social Life.—Direct experiencing of the things worth while in life has, obviously, social as well as individual significance. Among the divers values on life's well-spread table, each age and race has tended to select one or two as peculiarly desirable and satisfying. To the ancient Greeks Reason

¹ See Dewey's *Democracy and Education*, Ch. XVIII. The writer gladly acknowledges her profound indebtedness to America's leading educational philosopher for many of the vantage points from which this subject is viewed.

and Beauty appealed as of supreme worth; and rarely has any people experienced so deeply the enrichment and quickening of life that inhere in the pursuit of these ideal ends. The Middle Ages seized upon intimate, personal appreciation of God as the crowning human value, beside which love, reason, and beauty paled into significance. Our own period is, of course, conspicuous for the worth it attaches to material possessions together with mastery of natural things and forces. But each epoch of history, in selecting its special values, has not wholly ignored the other goods of life. It has merely relegated them to subordinate positions in an ordered scheme of human worths, each occupying a separate domain. Thus the diversity of values that in combination would make a rich and satisfying life have been deprived of the reinforcement that would come from vital relationship to other ends. The result has been that few if any people have "seen life steadily and seen it whole." Seizing the cup of some one good to drain it to the dregs, each epoch has also sought—sometimes doubtfully, sometimes almost guiltily—to savor other appreciations.

The loss to the age and to the individual of this rigid demarcation of human values is seen to be two-fold. First, it has meant that certain experiences, laden with emotional and intellectual satisfactions, have been but superficially enjoyed, if at all; further, it has reacted unfortunately upon the values selected as having greatest worth. The Greek love of reason led them to enter the temple of science with inquiring minds. But their scorn of manual labor, their abiding contempt for material interests, was the chief cause of their small achievements in science and their feeble appre-

ciation of the rewards that come through methodized scientific discovery. Likewise, the Middle Ages, in elevating religious contemplation and ecstasy into a unique place in the scheme of values, struck a deadly blow at its vitality. Not only did religion fail to minister to life in its political and economic aspects, but, with the dawn of new scientific interests, its isolation from these living currents of social experience deprived it of the nourishment essential to its growth. With the hewing out of a new tool of scientific method and the spread of the critical attitude of mind, the dogmatic religion of the Middle Ages, bitterly hostile as it was to this new realm of knowledge, received a staggering blow from which it has never recovered.

But the division of social life into sharply defined interests, with the consequent pigeonholing of values, is not confined to the ancients. History presents no period in which the fencing off of the various vital concerns of mankind, each bearing its own peculiar good, has been so thoroughly carried out as in the present. Although the Greeks left all economic affairs to slaves and artisans, the free citizens of Athens experienced a fullness and diversity of life rarely if ever approximated by any other people. Few nations have understood so well how to interpenetrate daily living with a wealth of values each playing into and reinforcing the others. Thus physical training was made to serve not health alone but æsthetic, civic, moral, and religious ends. So with æsthetic and intellectual worths. Through their intimate relation to the concerns of active civic life, they were vastly stimulated and enriched. Again in the later Middle Ages the infusion of religious values into art, architecture, and

the intellectual activity centered in universities brought about, for a time at least, an enhancement not only of these interests but of religion itself. But in this industrial age we have effected so hard and fast a division of human concerns that each interest tends to be relegated to its own restricted domain and effectually prevented from encroaching upon the territory of the others. Witness the exclusion of art, social values, and religion from the field of business and industry. The result is a crude, almost brutal materialism revealing itself in quantity production devoid of beauty; in the ruthless greed for power and wealth of our captains of industry; in the hard lives, empty of well-nigh all that makes life worthy, led by millions of laborers; in the ugly slums, a silent refutation of our professions of democracy. Witness again the almost complete divorce of critical inquiry from morals and *mores*, of humane social philosophy from political life. Politics, business, art, science, religion, social intercourse—each goes its way and achieves its limited values largely unassisted by the others.

Values in Education.—This pigeonholing of the varied interests of human beings, so that the contribution of each to the other is merely "external" and "accidental," has been vigorously pointed out by Professor Dewey.¹ Very clearly, also, has he shown the reaction of the social situation upon education. In the course of historical evolution mankind has accumulated a fund of knowledge, skill, and values concerned with the diversified experiences of life. These have been logically organized into studies and are supposed to subserve all the desirable ends that the liberally edu-

¹ *Democracy and Education*, pp. 290-91.

cated man or woman should achieve. But the division of social experience into separate realms, each with its own good, has borne fruit in the division of individual experience in the school into rigidly separated studies, serving different ends and embracing different values. Mathematics, for example, has its own educative worths, not to be related to those inhering in geography, history, literature, the social sciences, and morals. To be sure, where the relationship between knowledges has been impossible to ignore the connection has been made, as in the case of mathematics and the exact sciences, and geography and history. But these are exceptional instances. The consequence of this fencing off of studies from each other has been precisely the same in education as in social life. School physics and chemistry, for example, tend to remain just physics and chemistry, consisting of organized bodies of facts, "laws" and theories, and of laboratory experiments for testing the same, but not related, except at a few points, with each other and above all with the problems of community living. The humanizing of these studies that would follow from their intimate union with economics and industry not to mention literature, would vastly enhance their own values. Again the connection of the study of ethics with economics, social and political theory, science and vocational training, would immeasurably increase its subjective worth and reveal its blood-relationship with other phases of life and thought.

If the rich values of life are to be brought home to our girls, then, two outstanding needs in the education of the present must be met: (1) *the direct, personal experiencing of the worths inhering in the various*

studies; (2) the breaking down of the barriers built up between the subjects themselves and between them and daily living. To accomplish these reforms, however, would require a root and branch reorganization of education. It would mean that schoolrooms would become places where live experiences were obtained by boys and girls—experiences affording ample opportunities for bodily activity in the working out of projects framed by the students, not the teachers. In the course of these activities satisfying values would be personally felt—intellectual values in the solution of problems, emotional values in familiar acquaintance with great music, art, and literature, as well as with the joys of social give and take; efficiency values in actually doing things, in carrying forward plans to more or less successful conclusions. In such vital experiences studies would find their place as means to further the desired end; and their living relationship to each other and to the social life of the present would be woven into the very structure of the mental life of young women. Then would disappear the prevailing tendency to make of studies a dull routine of efficiency in speaking and writing, a tendency that has reduced educational values to pallid and shrivelled things.

But if education is to make the enhancement of life through the development of fine and true appreciations one of its chief tasks it is clear that this cannot be successfully accomplished merely by transforming schools into places where active experiences with persons and things are going on. The quickening of the *imagination* of girls by helping them to experience the full reach of intellectual and emotional possibilities in any educational situation is of paramount impor-

tance. Thus, in the study of history and literature, opportunities for dramatization of significant events in the life of nations should be encouraged, together with appreciative reading of portions of their great literature, and sympathetic study of their art—not by means of text-books, but through the medium of photographs, screen pictures, and visits to art museums. To surround girls in the school-room with reproductions of noble art and to encourage them to add to these art forms others paid for by their own coöperative efforts has been proven a good method of stirring an unfeigned interest in art—the first step toward its sound appreciation. All this of course implies that the teacher shall be herself capable of an intimate and vivid imagining of all the possibilities for growth in a subject, so that children may be helped to experience the various intellectual, aesthetic, or moral values that may inhere in it. The widespread educational practice of restricting appeals to imagination to the early years of school, while in the later period stress is laid only upon memory, logical thought, and technical skill, is a primary cause of the poverty of imagination and hence poverty of inner experience so characteristic of adults. To achieve a life abounding in significance requires the free play of imagination in extracting a wider range of meaning and value from experience than appears to the eye of sense. To accomplish this with the individual is to educate personality.

Appreciation of values is, of course, intimately related to the forming of standards. No one can have the mental satisfaction of successful thinking through a baffling problem, the intelligent enjoyment of a noble painting, the construction of a useful or beautiful

object, without unconsciously forming standards of intelligent thinking, of artistic design, of efficient fabrication. Hence the path of direct, personal appreciating is the only road to the development of sincere standards. The attempts of teachers to make short cuts to the desired ends by talking about the value and importance of moral virtues, unbiassed thinking, enjoyment of beauty, enlightened public spirit, etc., result chiefly in making students insincere by encouraging them ostensibly to adopt standards whose values are not perceived because they have never been personally experienced.

Technical vs. Liberal Studies.—Following the development of science and its application to industry, new regions of economic and social endeavor have been opened up and a formidable array of new studies has been added to the curriculum of our higher schools. The advent of these technical courses, such as biological analysis, industrial chemistry, and dietetics has brought about a lively controversy centering about the question of the relative educational values of these studies and the old liberal arts courses. The charge is made that technical subjects are merely means to manual efficiency; that they are wholly lacking in the emotional and intellectual values that inhere in the so-called cultural studies. Therefore such worth as they possess is solely instrumental, not intrinsic. From this point of view the girl who specializes in biological chemistry with the purpose of entering a municipal laboratory gains no rich and rewarding satisfactions from her studies. She is merely acquiring useful information and technical skill. The shallowness of such a judgment would perhaps be revealed to these critics

could they observe, over a period of time, the labor and study of applied scientists such as those who are conducting experiments in the Rockefeller Institute of Medical Research. Gripped by problems of profound human significance; their imagination stirred by the challenge to formulate hypotheses that will square with the facts; enjoying the satisfactions that come from intricate and delicate laboratory operations, expertly performed; and spurred on by the hope of adding to man's control of the conditions of living—these men are realizing some of the most gratifying experiences of human life. The value of a study cannot be determined by the nature of the subject matter with which it deals but rather by the range and depth of the appreciations it makes possible. *With due regard to methods of presentation*, mathematics may be more quickening to the imagination and judgment of worth than the Homeric epics, and physics than fine arts. Home economics may be taught with the emphasis upon the technique of cooking, table arrangement, and budget making. Or it may be so presented to girls that the intimate relation of the home as an economic and social unit to analogous agencies in society at large is clearly perceived. Therefore it seems inadvisable to make out an ordered scale of subjects, according to their potential values, with the technical studies carefully relegated to the bottom. Each subject, properly pursued, contains its own enjoyable experiences, even though art, music, and literature are peculiarly rich in these values.

But not only has every subject latent possibilities for giving the student a realizing sense of good, it is also true that every study has its technical aspects in which

both teachers and learners may become immersed. The technicalities of Greek, in the hands of an unimaginative teacher, would appear to be no more liberalizing *per se* than those of engineering or household economics. Instructors ignore the fact that these technical details are but means to the end of securing freer play within the subject and thus bringing about an enrichment of experience and understanding. Nevertheless, although in any subject the husk may be substituted for the kernel, it cannot be denied that the technical studies are peculiarly prone to this mistake. In an age when the wheels of industry whirl noisily and Big Business is enthroned, these subjects may easily become mere means to mechanical skill. Indeed the tendency so to regard technical studies in schools and colleges is clearly marked. This is only to say that the education of any period is a pretty faithful mirror of its social life. If that life sets high value upon the production of material goods and relatively low value upon social welfare and the cult of beauty, this attitude will be reflected in the schools. The divorce of intrinsic values from instrumental, of intelligence from idealism, that is daily exemplified in industry and business is tending to repeat itself in education in an undue stress laid upon technical efficiency at the expense of broad understanding. If the standards of worth in society are the accumulation of wealth and the increase of brute power over human beings and physical forces, the standard of education will tend to become how to "get on" in life in a purely materialistic sense. In consequence the technical subjects will be presented in a narrow, utilitarian spirit with emphasis on the acquisition of technique.

Neglect of Social Values in Higher Education.—

As we have seen, the individualizing of personality that so often is the outcome of higher education is by no means accompanied by an equal degree of socialization. Especially has this been true of young women leaving the college and graduate school after years of pleasant academic life during which they have been introduced to much "of the best that has been thought and said in the world," and have developed a critical intellectual method. In large measure the appeal of the faculty of college and university (and this is true also of the high school) has been to the intellect, not to the social impulses and the "power to do." In consequence, higher education has tended to develop in young women a growing sense of independence of other persons and of the activities and agencies of social living. Every year there are graduated from high schools and colleges thousands of young women who are actuated by the selfish desire to make a place for themselves in the world, even at the cost of others, or to continue their agreeable intellectual pursuits untroubled by the necessities and strivings of their fellow beings. It is a striking fact that elementary education is awakening to the importance of developing in children a sense of social interdependence and habits of social give and take, while high schools and colleges are disposed to pass rather lightly over this phase of education except in classes in social theory. In consequence, a rewarding domain of social experience with its accompanying values has been but partially opened to young women. Probably only a small number of the girls who receive high school diplomas or bachelor's degrees have glimpsed the satisfactions

that spring from working with an organized group for an end which serves the public good, or have felt the dignity and pathos of human life through coming into sympathetic and helpful contact with many types of human beings. To deprive young women of these experiences is to run the risk that their growth in social understanding and sympathy will be permanently hampered and that they will withdraw into a social isolation and a mistaken sense of complete independence which may result in the arrest of growth—the crystallization of life. The adult woman needs a realizing sense of personal social dependence as much, if not more, than the growing child if she is to attain the full measure of her personality.

Obviously the withdrawal of highly educated women from intimate contacts with social life in the interest of a purely personal culture entails not only a retardation of personal development but also an irreparable loss to society. For while these women are absorbed in carving out careers or in speculating about intellectual theories, practical-minded persons, working for their own interests, are at the helm of affairs. In the vivid phrase of Professor Dewey: "While saints are engaged in introspection, burly sinners run the world." If cultivated women are to follow the example of many well-educated men and retire in disgust from the hurly-burly of public life the social waste will be appalling. For it is, as has so often been said before, precisely the divorce of practical idealism from the affairs of daily living that has brought about the crude materialism of the present age. It is a truism that this evil cannot be cured by withdrawing from its

polluting influence but by bringing intelligence, good-will, and working ideals to its amelioration.

Moral and Religious Values.—Little has been said specifically about the education of women in appreciation of moral and religious worths, chiefly because the writer finds it difficult to disentangle these from the values comprised in a humane social philosophy embracing all mankind. It is hard to conceive of any moral end, such as brotherly good will, honesty, purity, unselfishness, courage, charitable judgment, which was not born of a social situation and has not a social reference. The woman who really appreciates the profound meaning and value of a life lived in active helpful communication with others will not need specific lessons in the moral virtues. So with religion. The departure of Christianity in every age from the social gospel of Jesus is too obvious to require more than passing comment. Not long ago the ambassador of the United States to a European government publicly declared that in his opinion "the hostility of professing Christians to Christianity" was the chief cause of the disruption and misery of the world that confronts us on every hand. How to bring back the social principles of Jesus Christ into the every-day relationships of individuals, states, and nations is the supreme task of religion. Beside this great enterprise, theological dogmas and ecclesiastical forms recede into the dim background of unessential things.

The Peculiar Contribution of Women to Human Values.—The liberal opportunities for higher education afforded women in America and the opening of one door after another into the manifold fields of human endeavor—economic, political, social, æsthetic,

scientific—has caused many thoughtful persons to ask whether or no women have a peculiar contribution to make to social values. Beyond peradventure they have made such contributions in the past. History shows that during the later centuries of the Middle Ages it was the influence of women that nurtured the gentler virtues and emotions of life. They it was who set great value on protection of little children and helpless women in troubled times of war, on consideration for others from which sprang courtesy, on courage and endurance in the defense of one's land and lady, and on romantic love as the essential element in sex relations. Gentleness, courtesy, courage, romance, these are values which have been highly prized by civilized women in every age. A thirteenth century troubadour thus bears witness to women's influence:

"There is reason enough why
We ought to hold women dear;
For we see happen very little
Courtesy, except through women.
Well know I that for the love of ladies,
The very clowns become courteous."¹

Social history also makes plain that women have been sincere appreciators of poetry, music, and art, even though they have as yet created little in these fields. Likewise women, confined largely to their homes and always occupied with the nurture of little children, have had enormous influence in developing the domestic virtues of family pride, family loyalty, and self-effacing service, together with the quiet joys that center about hearth and home. It seems clear, then, that women have been preëminent in developing

¹ Wright, *Womankind in all Ages of Western Europe*, p. 161.

and conserving those values that would tend to make family life enduring, peaceful, and enjoyable and to secure for little children a good start in life. And by thus refining the crude impulses of mankind they have rendered an immeasurable social service.

But it is plain that if women are to enter upon fields of endeavor outside the domestic circle they should be prepared to add to or enhance the values of life in these larger spheres. What have women to contribute in business, industry, politics, education, and a variety of other social enterprises? This is a searching and crucial question. It is quite possible that women, interested in some chosen occupation, absorbed in its problems and details, and desirous of "making good" in it, may lose sight of its detachment from art, social values, and religion as completely as many men have done. There seems not much reason for regarding women as more "moral" than men, except in the realm of sex and family relations, where it has been in their interest to develop and conserve certain values and where powerful social pressure has tended to make them conform to rigid social standards. Already there is some evidence to show that women in business and politics can be quite as self-seeking and unscrupulous, quite as blind to the inhumane phases of their vocation, as their husbands and brothers. The sooner women get rid of the notion that a peculiar moral sanctity hovers about them the sooner will they face squarely and honestly the danger of their becoming, like some men, driving machines, deaf to the call of beauty, blind to the fundamental rights of men and women, pushing ahead ruthlessly to their goal of wealth or power or prestige.

Nevertheless, while the defects and frailties of women should be clearly envisaged, it seems fair to express hope—even faith—in those emotional and moral qualities in them that have been socially selected through many centuries of evolution. Surely it is not idle to believe that the greater value most women attach to human life—which they have borne in agony and nurtured in patience—will make itself felt when they have entered more actively into the busy marts of industry, business, and politics. Although it is true that they have already shown themselves capable of shrewd and unsocial practices in these fields, it is even more apparent that the influence of large organizations of women, newly enfranchised as they are, is being powerfully exerted against the economic exploitation of human beings, against insanitary conditions of living, against the ugliness and vice of great industrial centers, against the denial of full educational opportunities to all the children of our democracy. On this humane and nurturing sentiment in women, rising almost to a passion in the few, rests much of the world's hope of progress toward more healthful, happy, and beautiful living. Speculating on this question of the contribution of fully emancipated women to social well-being, Professor Thomas says:

"In all our relations there is too much of primitive man's fighting instinct and technique; and it is not impossible that the participation of women . . . will contribute new elements, change the stress of attention, disturb the equilibrium, and force a crisis which will result in the reconstruction of our habits on more sympathetic and equitable principles. Certain it is that no civilization can remain the highest if another civilization adds to the intelligence of its men the intelligence of its women."¹

¹ *Sex and Society*, p. 314.

It seems clear enough that if women are to make a peculiar gift to the society of the future a heavy responsibility rests upon education to cultivate and bring to fruition in them their feeling for human life and its gentler values without taint of sentimentality. To inform the mind richly, to develop sound intellectual methods, to open the windows of the soul to æsthetic and moral beauty—this is not enough. Above all we must strive to show the bearing of these values upon social life as it is lived to-day in all its repellent materialism. For if we train women merely to carry forward things as they are, or even to add to the sum of dehumanized knowledge and control of natural forces, our cultivation will yield Dead Sea fruit. Knowledge and power to think and to do—these are primary ends of education. But unrelated to what Matthew Arnold calls “the sense for beauty and the sense for conduct” they easily become instruments for the perpetuation of a social order conspicuously devoid of beauty and humaneness. A recent contributor to the *New Republic* writes despairingly of the æsthetic and moral “midnight” that the world is facing since the war: “We are suddenly stripped of our dreams, left, like a tired-out civilization, without aims or beliefs, yet with young life hurrying in us.” May not the way out of our disillusionment lie in educating the young life of the nation—every girl as well as every boy—to some form of useful work infused with social purpose? This work may be anything from the teaching of philosophy to the management of a hospital, so it expresses the personality of the worker and affords chances to work with others for the common good. Such a theory is being tried out by Antioch

College in accordance with a plan by which every man and woman student will alternate study with practical work—five weeks of each. This college believes that the salvation of society can come only from the diffusion of work with active intelligence, broad sympathy, and willingness to strike out new paths. In the words of the Antioch Plan: “The best cultural values are gained not when we escape from industry [or any useful occupation] but when we make it express our highest purpose.”

The Worthy Use of Leisure. — The meagre appreciation our age accords to ideal values is nowhere more clearly revealed than in our times of leisure. While social writers and educators alike loudly deplore the vogue of “jazz,” musical “revues” and the like, they do not always trace the thirst for these amusements to their sources. These would seem to be first, the strain of life in a hurried, mechanized, industrial society, and secondly, the empty minds of individuals who seek relaxation and enjoyment without ever having been educated in knowing where to find them. Educated women no less than men flock to the moving picture shows, the sensational “revues,” and the tea-dances that afford them easy emotional gratification; and an appalling amount of time every year is given over to these cheap entertainments. This is not to say that relaxation and enjoyment are not legitimate and very necessary ends, but to point out the almost total absence of the finer values from these amusements. It is surely a commentary upon the character of education in America that so few people understand “the worthy use of leisure.” Yet our age is not lacking in opportunities for such enjoyment of leisure as shall

at the same time enrich the mind and quicken the finer emotions and appreciations. A young woman who is not growing, through her avocations and pleasures as well as through her chosen work, to a truer appreciation of beauty as well as to a broader and more sympathetic understanding of the mystery, the tragedy, the possibilities of human life, is but imperfectly educated. Never to have felt the spirit quicken and aspire when great artists speak through brush and instrument and pen; never to have been stirred by "the mystic force of communication—the miracle of shared life and shared experience," is to be poor indeed. For in such case, neither work nor leisure have given to the soul the deepest experiences, the most rewarding appreciations that are its birthright.

If these values are to be realized by our young women, schools and colleges must consciously grapple with the problem of how to educate them to a wiser use of leisure. Educators have too long ignored this question, shifting the responsibility to the home where it has been held to belong. But it is patent to all interested observers that too many homes are making no honest effort to attack the problem, while others are not even conscious that one exists. Not rarely it is in her own family circle that the girl has acquired the taste for cheap and sensational amusements which she indulges so extravagantly in school and college. Although relatively little, perhaps, can be done to improve her habits of recreation without the coöperation of her parents, nevertheless teachers and advisers should seriously grapple with this question, bringing all their intelligence and good will to bear upon it. Would it not be possible, by the use of tactful and

democratic methods, to bring about in coeducational universities and women's colleges, as well as in high schools, the appointment of a committee on recreation consisting of members of the faculty and student body? This group could then make a study of the existing situation with respect to amusements and suggest other forms that would provide real enjoyment as well as opportunities for growth. Coeducational institutions especially afford splendid chances for working out a program of sane recreation in which the two sexes could share. Why not, as Zona Gale suggests, try to develop in our young people "an intelligent attitude toward drama"; why not help them to enjoy presenting worth-while classic and modern plays, to take part in pageantry, folk-dancing, musical evenings? If the committee were inspired by a sense of the high importance of its task, if it were imaginative enough to frame plans appealing to young people and eloquent enough to fire students with something of its own enthusiasm, much might be done to raise young people's standards of recreation. Since evils do not cure themselves, these standards will remain crude and unworthy until the problem is thoughtfully analyzed into its component factors, a tentative plan of action formulated and a courageous attempt made to apply this plan to the situation with a view to modifying it in the light of its results. Because the coeducational universities furnish more normal social conditions with respect to recreation than the separate colleges for women it is earnestly to be hoped that they will be in the vanguard of the movement for its betterment.

General Summary.—An attempt has been made in

this chapter to suggest certain fundamental ideas which should govern the efforts of educators to enhance the personal standards and values of every girl. But the education of personality which this implies cannot be accomplished save in a vital social medium, rich in those æsthetic, intellectual, and spiritual values that should be individually realized by every woman. This is only to restate a position that has appeared again and again in the discussion of various phases of the education of women. To say that the culture of personality, the liberation of individual powers, is the supreme end of education is to state only a half truth; its complement is the fact that this cultivation cannot reach full fruition in isolation—partial or complete—from the living currents of social life about us. If this dual principle be accepted, its fair-minded application to existing educational institutions for women must result in their indictment on several counts. In the first place the full and free development of the individuality of young women is too often subordinated to conventional conceptions of what women are and what they ought to contribute to society. As we have seen, the prevailing theory that "*Woman*" represents an easily recognizable domestic type, together with the firm conviction that her best work for the world can only be done in the home *as at present organized*, are responsible for the attempts of educators to differentiate the education of women from that of men. Furthermore, it is answerable for the outcry against the higher education of women as the chief or only factor in the declining marriage and birth rates among educated classes; in the insistence upon the introduction of *compulsory* courses in home economics

and child care; in the flimsy arguments adduced to prove that the mental make-up of women is rigidly determined by sex and is designed by nature for the functions of "consumption" and appreciation—not for creative work. Thus the great end of the liberation of personality for self-expressive work of social utility has been more dimly perceived and less effectually attained in the case of women than in that of men.

But this is not all. The failure of educational institutions for women to envisage the truth that free personality cannot attain fruition in an atmosphere of academic aloofness from the concerns of every-day social life is responsible for certain other defects in contemporary educational practice. It has reinforced the historic conception of "culture" as a priceless personal possession having nothing to do with the work-a-day world and its merely material interests. This, of course, has led to the almost complete exclusion from liberal arts colleges for women of courses in the great vocational fields and, further, to the refusal so to present subjects having a vocational bearing that their practical applications might be fully understood by the students. On the other hand the severance of education for leisure from education for work has borne fruit in a type of vocational training for girls of the laboring class (so far as this training has been provided at all) which is illiberally conceived as consisting mainly in acquiring technical skills having immediate market value. Quite as important as the infusion of liberal education with social purpose is the emancipation of vocational education from the dominance of a cramping conception of its end.

The withdrawal of high schools and colleges from

community affairs into an intellectual atmosphere of their own making is further responsible for their neglect of the social values in education. As we have seen, educational institutions in the past, and to a considerable extent in the present, ignore the fact that young women must live in a world of unsatisfactory social adjustments giving rise to live social problems. A purely theoretical education tends to develop in young people a false conception of knowledge as an end in itself or as a means to forging ahead in life without too much regard for one's fellows. In consequence, our towns and cities harbor too many young women struggling to hold their own in a sharp competitive struggle, unenlightened in social outlook, and unresponsive to the call of social movements. Furthermore the failure of the home and the school, working together, to make an intelligent and sympathetic study of the "new girl," emerging in this transitional period in all her crudity and self-assertiveness, must be held chiefly accountable for the "flapper" in our midst—a type by no means restricted to the period of early adolescence. Here, again, the prevalent idea that education is primarily concerned with training the intellect and imparting information bears the onus of responsibility for this state of affairs. Finally, the attempt to educate girls to an appreciation of the finer values of life apart from concrete experiences embodying these values has resulted in too many instances, as this chapter has sought to make plain, in a merely conventional and insincere acceptance of the standards prized by cultivated people.

But this study of outstanding issues in the education of women may not properly close with words of adverse

criticism and warning. "The future of the education of women in America is big with hope and promise. It is the author's belief that the widening of opportunities for women, both educational and social, the gradual breaking down of the traditional conceptions of woman's nature and woman's sphere, will proceed without serious hindrance. Unquestionably, however, the movement could be hastened as well as more intelligently directed were individuals immediately interested in women's education to examine in a critical spirit their own educational philosophy respecting the larger purposes, the procedures and the available means in the education of women to enable them to play a larger and more useful part in the life of the twentieth century.

APPENDIX

FINDINGS OF A QUESTIONNAIRE ON THE AMOUNT AND CHARACTER OF PHYSICAL EDUCATION AFFORDED HIGH SCHOOL GIRLS AND COLLEGE WOMEN IN 1921

| | |
|---|-----|
| Number of Colleges and Universities to which the questionnaire was sent | 100 |
| Institutions responding | 61 |
| Number of High Schools to which the questionnaire was sent | 120 |
| Number responding | 44 |

Question I. Is there a director of physical education in your institution?

| UNIVERSITIES AND COLLEGES | | |
|---------------------------|----|-----------|
| Yes | No | Part Time |
| 57 | 3 | 1 |
| HIGH SCHOOLS | | |
| Yes | No | No Reply |
| 38 | 4 | 2 |

Of the three higher institutions replying in the negative, one stated that the university was preparing to introduce physical education; another reported that the work was in charge of the Y.W.C.A. Of the four high schools reporting no physical director, one declared that what "work is done is supervised by the director of physical education of the school system." Another wrote that a class-room teacher was in charge of the girls' physical training. A third stated that there would be a physical director when the school removed to its new building.

Question II. Is physical training in some form required of all women students in every class?

UNIVERSITIES AND COLLEGES (61)

| | |
|--------|------------------------------------|
| Yes 13 | Freshmen only 5 |
| No 5 | Freshmen and Sophomores 32 |
| | Freshmen, Sophomores and Juniors 6 |

HIGH SCHOOLS (44)

| | |
|---------------------------|--------------------------------------|
| Yes 19 | Freshmen, Sophomores and Juniors 3 |
| No 3 | Sophomores and Juniors 1 |
| Two Years 2 | Voluntary 3 |
| Freshmen only 3 | One Semester Required for Graduation |
| Freshmen and Sophomores 6 | 1 |
| | No Reply 2 |

It will be seen that slightly over one-half the colleges and universities require physical education of only Freshmen and Sophomores, while nearly one-fourth require the work of *all* women students. Two institutions in the latter group, however, stated that Saturday students and Senior and Junior day students are exempted from the physical training required of all resident women. Of the high schools, one (not listed above) reported that 30 minutes daily is given to physical exercises in the fall and spring, under student leadership, but failed to state whether such exercises are required of all students. The high school which requires one semester's physical education for graduation reported that credit is given for the work during the entire four years.

Question III. How much training is required?

The great majority of the colleges and universities reported that two hours (or periods) weekly were required. Five institutions require 3 periods weekly; five require 4 periods weekly; one requires 3 periods weekly of Freshmen and 2 of the remaining three classes; one requires 3 periods weekly for two years and 2 periods for the third year; and one requires 2 periods weekly for the first three years, offering 1 period weekly of optional work to Seniors. Several colleges men-

tioned the fact that walking was required of all students, and one college stated that 5 hours of exercise weekly, including walking, was required.

The time required for physical training in high schools varies greatly from 40 minutes weekly in the case of one school to 150 minutes weekly in one other school. One school requires 45 minutes "three or four times weekly"; another requires 3 periods weekly; another only one period weekly. But, as in the case of the colleges and universities, most of the high schools reported a requirement of two periods weekly, varying in length from 40 to 70 minutes.

Question IV. Are physical examinations made of every girl?

UNIVERSITIES AND COLLEGES

| Yes | No | Medical and Physical | Only of Special Groups | Voluntary |
|-----|----|----------------------|------------------------|-----------|
| 43 | 3 | 2 | 13 | 2 |

HIGH SCHOOLS

| Yes | No | Only of Special Groups | Not Complete |
|-----|----|------------------------|--------------|
| 20 | 16 | 6 | 2 |

Of the colleges and universities which give examinations only to selected groups the reports were as follows:

Freshmen and Sophomores and all taking sports, 1; all regularly enrolled girls, 1; all taking athletics, 1; all entering students, 3; every new student and again at the end of the freshman and sophomore years, 1; those taking required physical education course, 1; Freshmen and all who take part in voluntary sports, 2; entering students and those taking required physical training, 2; Freshmen and Sophomores, 1; voluntary examinations, 2.

Eight high schools made the following special reports concerning required physical examinations:

To some extent in the hospital room, 1; not complete examinations, 2; only those sent to the school physician, 1; all taking gymnasium work, 2; only in cases where the girl seems easily fatigued, 1; only for faulty posture, 1.

Question V. Are the "personal histories" of the girls recorded?

UNIVERSITIES AND COLLEGES

| Yes | No | Conditional Replies |
|-----|----|---------------------|
| 47 | 7 | 7 |

HIGH SCHOOLS

| Yes | No | No Reply |
|-----|----|----------|
| 12 | 25 | 1 |

Of the seven colleges and universities which made conditional replies the reports with respect to "personal histories" are as follows:

Of Freshmen and Sophomores only, 1; "briefly," 1; of Freshmen and those going into voluntary sports, 1; only of girls taking required work, 2; of all regularly enrolled, 1; only of those physically defective, 1; of Freshmen, Sophomores and all in sports, 1.

The five high schools sending conditional replies reported as follows: Only in case of operations and serious illnesses, 1; to some extent by school nurses and physicians, 2; for a few cases, 1; only of those sent to the school physician and whom the welfare workers see in their homes, 1; not to any extent, 1.

Question VI. Are remedial exercises prescribed for girls requiring such? Are the results good?

UNIVERSITIES AND COLLEGES

| Yes | No | Conditional Replies |
|-----|----|---------------------|
| 47 | 5 | 9 |

HIGH SCHOOLS

| Yes | No | Conditional Replies |
|-----|----|---------------------|
| 16 | 13 | 15 |

Nine colleges and universities sent the following conditional replies: As many as possible, 1; as a rule, 1; sometimes, 2; to a certain extent, 1; only setting up exercises, 1; very recently begun, 1; some put in special class for semi-individual work, others advised to pay particular heed to certain parts of class work, 1; very little is done; girl with marked

defects referred to the orthopedic doctor for special corrective work, 1.

Fifteen high schools sent conditional replies as follows: "In one school only are there teachers enough to handle cases," 1; in some schools where equipped for the work, 1; very little done, 2; building up underweight girls only, 1; suggestions made but not supervised, 1; in some cases only, owing to an intolerant attitude on the part of many in the state, 1; just started, 1; only exercises for posture, foot, and constipation, 1; the worst cases only given remedial exercises, 1; recommended but only a small percentage take them, 1; to correct poor posture and in some cases of extreme physical conditions, 1; prescribed for many but impossible to follow up except in a few cases, 1; only postural exercises, 1; to a limited extent; time required for the physical examinations necessary to prescribe is so great that teachers cannot attend to it, 1.

RESULTS OF REMEDIAL EXERCISES

UNIVERSITIES AND COLLEGES

| <i>Excellent</i> | <i>Very Good</i> | <i>Good</i> | <i>Fair</i> | <i>Conditional Replies</i> | <i>No Reply</i> |
|------------------|------------------|-------------|-------------|----------------------------|-----------------|
| 4 | 3 | 15 | 12 | 18 | 9 |

HIGH SCHOOLS

| <i>Very Good</i> | <i>Good</i> | <i>Fair</i> | <i>Conditional Replies</i> | <i>No Reply</i> |
|------------------|-------------|-------------|----------------------------|-----------------|
| 1 | 8 | 2 | 9 | 24 |

The following interesting replies were received from certain universities and colleges. "Results only fair due to lack of time, space, and instructors; results depend on the degree of abnormality and in extreme curvature cases depend on the age of the girl; the results show constant improvement as a whole; yes, when faithfully carried out; in some cases excellent, some only fair, yet improvement to some extent in every case; flat feet is the only deformity found—our girls unusually free from abnormalities; very good indeed—many continue through the Junior and Senior years; very fair—most girls most enthusiastic to correct defects; quite

satisfactory enough to warrant students in asking to take corrective work; somewhat varying, but encouraging; fair in some cases, excellent in others; work well worth while—I do not see how we could do without it here where physical education is required; results depend on the girl; recently begun and some good results already; fairly good, depending on the degree of interest and cooperation that can be got; usually helpful in menstrual difficulties and slight curvature and postural defects; results of setting up exercises are noticeably good; good in a large number of cases, but not always striking or permanent; no time to do the work so as to get noticeable results."

As will be noted, a large number of high schools did not reply to the question concerning results. A few qualified answers follow: Results not very good—girls do not grasp the importance of the exercises and only do them under supervision; difficult to estimate; results particularly good in cases of flat feet and underweight; segregated groups too large for careful individual prescription; in some of our schools where we are equipped for this work we are securing very good results; some good results have been obtained; have just started work of this kind this winter so cannot judge results.

Question VII. Are measures taken to secure normal, painless menstruation? If so, what?

UNIVERSITIES AND COLLEGES

| <i>Yes</i> | <i>No</i> | <i>No Reply</i> | <i>Question Ambiguous</i> | <i>Only in Special Cases</i> |
|------------|-----------|-----------------|---------------------------|------------------------------|
| 46 | 9 | 4 | 1 | 2 |

HIGH SCHOOLS

| <i>Yes</i> | <i>No</i> | <i>No Reply</i> |
|------------|-----------|-----------------|
| 15 | 24 | 5 |

The reports of the colleges and universities concerning the remedial measures taken show that the problem of painful menstruation is being attacked very generally and with intelligence. Fifteen higher institutions stated that Dr. Mosher's exercises were being used; seven referred to lectures, instru-

tion or "advice" on general hygienic measures and two referred to regulation of general hygiene in the inter-menstrual period; sixteen institutions stated that special remedial exercises were given, especially mat exercises (in a reclining posture), exercise of the abdominal muscles, breathing exercises and massage; seven declared that menstrual sufferers were placed in special classes for remedial work; two stated that corrective exercises were prescribed to be done *at home* as well as in college; two referred to special advice given by the college physician when needed; three mentioned that in extreme cases a pelvic examination by the resident physician was recommended.

A few of the replies are worth repeating in detail. One eastern woman's college reported that a record of general hygiene is taken and the source of the difficulty discovered if possible. Work is given for posture and feet where such faults are discovered. Emphasis is placed on abdominal and breathing exercises and home exercises are prescribed. Advice is also given as to the matters of diet, rest, etc. Another reply contains the following statement which will no doubt be cordially endorsed by college instructors and deans of women: "I believe loss of sleep, lack of exercise, constipation, and nervous tension are the usual causes of dysmenorrhea in the college girl." A third reply stated that the remedial measures used include exercises under supervision and "*modification of habits of sleep, study, etc. The latter are to be reported on weekly to the instructor in physical education and the grade in that subject is dependent on the results.*" (Italics mine.)

Such high schools as reported in detail on remedial measures use much the same methods as the colleges, although none referred to Dr. Mosher's exercises as a corrective. One school reports that special exercises are taught in all physical education classes. Also attempts are made to relieve abdominal congestion by strengthening the abdominal muscles, reducing constipation, securing proper rest and keeping warm. An-

other high school states that a consistent attempt is made to build up muscular tone by explaining it to the girls and "creating the desire to have and to hold this panacea for manifold ills." Likewise the girls are encouraged to get the habit of being active.

Question VIII. Are girls excused from physical training during menstruation? If not, what method is employed for partial exemption? Do you approve Dr. Arnold's plan of encouraging healthy girls to continue physical training exercises much as usual during menstruation? Why?

The replies received to the first question follow:

| UNIVERSITIES AND COLLEGES | | |
|---------------------------|----|----------|
| Yes | No | No Reply |
| 55 | 2 | 4 |
| HIGH SCHOOLS | | |
| Yes | No | No Reply |
| 36 | 3 | 5 |

It will be seen that nearly all the colleges and universities excuse students from physical education during a portion of the menstrual period. The time during which they are released from floor work varies from one day to three days. Certain universities, however, are clearly experimenting with the plan of encouraging girls to take the less strenuous forms of exercise during the entire period of menstruation. In this connection it seems worth while to quote replies received from two large western universities.

One university writes: "Every girl is required to report in uniform. Those menstruating given special work. This plan works splendidly and I highly recommend it." Another reports: "Our rule is as follows: Girls may on the first day of menstruation report at the rest room and rest during that hour. Girls are encouraged to come to class if possible but to eliminate running and jumping. Our idea is that the hour of

Physical Education is primarily a healthful hour and whether the girl should exercise or rest depends upon the individual. These plans have been very successful."

With respect to approval or disapproval of Dr. Arnold's plan the replies may be grouped as follows:

UNIVERSITIES AND COLLEGES

| <i>Yes</i> | <i>No</i> | <i>Conditional Approval</i> | <i>No Reply</i> |
|------------|-----------|-----------------------------|-----------------|
| 6 | 22 | 19 | 14 |

HIGH SCHOOLS

| <i>Yes</i> | <i>No</i> | <i>Conditional Approval</i> | <i>No Reply</i> |
|------------|-----------|-----------------------------|-----------------|
| 8 | 10 | 10 | 16 |

Of the higher institutions favoring Dr. Arnold's plan one writes: "I do approve Dr. Arnold's plan because girls are much too apt to pamper themselves in this respect." Of those disapproving the plan one university writes: "I do not approve Dr. Arnold's plan. There seems to me to be too much of a risk that directors of Physical Education have no right to assume. The real harm may come years afterward. I doubt if he has 'followed up' his students for any length of time after they have left his school." Of the high schools which approve the plan one writes: "Yes. It is a natural function and after school days many will have to perform their daily work regardless of menstruation." Conditional approval is given to the plan by a high school in the South: "I believe that healthy girls should, as they progress in training and in hygienic living, be encouraged to shorten the 'exemption' period, but with due regard to the kind and extent of physical activities to be practiced. I should eliminate jumping and vigorous exercises and apparatus work because of the extra weight of the uterus and therefore danger of a ptosis. Exercises of endurance should be avoided because they increase breakdown of tissue in genital organs. Under healthful conditions the menstrual period should not be one of semi-invalidism."

Question IX. Is instruction given women students in sex hygiene and the problems pertaining to sex?

UNIVERSITIES AND COLLEGES

| Yes | No | No Reply |
|-----|----|----------|
| 40 | 20 | 1 |

HIGH SCHOOLS

| Yes | No |
|-----|----|
| 16 | 28 |

Question X. What methods are employed? Are the results satisfying?

By far the greater number of colleges and universities report that lectures in sex hygiene are given in connection with a course in "general" or "personal" hygiene usually required of Freshmen. Special lectures by a physician—resident or visiting—are mentioned by eleven colleges and universities, but only two state whether or no attendance is compulsory. In a few instances these lectures are given by the Director of Physical Education and in two cases by the Dean of Women. One university states that reproduction is discussed in an elective course in biology and physiology; a southern university declares that special attention is given to sex hygiene in a course under the instruction of the Physical Director. The course consists of lectures, discussions, and *research work*. Two colleges report that sex instruction is given in connection with physiology or anatomy courses; three others that it is taught in connection with a laboratory course in biology. One college contents itself with assigning to seniors certain readings in sex hygiene to be reported upon.

The method used by the sixteen high schools which give instruction in sex hygiene do not differ greatly from those of the colleges. Lessons in personal hygiene or physiology furnish the opportunity for sex instruction in most cases. One school reports that the anatomy, physiology, and hygiene of sex organs and the psychology of adolescence and puberty are

taught in connection with lessons in biology and in informal talks. Such instruction is incidental to work in the development of animal and plant series, which stresses progress due to sexual methods of reproduction. One large city system reports that health talks are being given in the high schools where the subject of sex is "not taboo." An eastern city high school is offering a course in social hygiene to sophomores, given by the social director, and is supplementing this with "impromptu talks."

The sharp disparity in numbers between the high schools and the universities and colleges with respect to instruction in matters of sex is deplorable but hardly surprising. The American high schools are controlled by Boards of Education not always composed of enlightened individuals and frequently dominated by uninformed public opinion. So far as the evidence of this questionnaire goes it shows clearly enough that a veritable army of young girls is graduating from our secondary schools every year having received in school no scientific instruction and having been imbued with no fine idealism concerning sex relationships. Girls as well as boys are left to form their standards on the basis of information picked up from the street and the cheap novel.

As to the results secured by the various methods in use there is not much evidence to be gleaned from the reports. Only one high school replied to the question with the response that results were "difficult to determine." Among the higher institutions there seems considerable divergence of opinion on this question. Seven out of the fifteen colleges and universities replying to the question stated that the results had been satisfactory. Two of these declared that students constantly testify to the benefits received. A western state university reports the results as "gratifying"; while a southern university states that "the interest and enthusiasm have been very satisfying." On the other hand one eastern woman's college reports that results obtained from sex instruction

have been "not very satisfying"; and two other institutions declare that results have been only moderately satisfactory. The seven colleges and universities remaining report that results are doubtful or that there is no certain method of determining them.

Question XI. Is there a gymnasium for the use of girls in your institution?

UNIVERSITIES AND COLLEGES

| Yes | No |
|-----|----|
| 57 | 4 |

HIGH SCHOOLS

| Yes | No | No Reply |
|-----|----|----------|
| 35 | 8 | 1 |

It will be noted that an overwhelming majority of the colleges and a large proportion of the high schools which reported have gymnasiums for the use of the girls. However, seven of the state universities report that women alternate with men in the use of the gymnasium; one declares that its gymnasium has no equipment; and another states that there are no adequate dressing-rooms or showers. Several of the eastern women's colleges report that, in addition to the gymnasium or gymnasiums, a pool, a fencing room, special exercise rooms, a large roof, etc., are provided. Three high schools state that girls alternate with boys in the use of the gymnasium; one high school reports that part of the students use the corridors for physical exercise; another that the lobby is used for physical culture and there is little apparatus; another that the gymnasium is small and it is impossible under present conditions to meet the state requirements for anything but the class periods per week.

Question XII. Are there athletic fields or playing grounds for the use of girls?

UNIVERSITIES AND COLLEGES

| Yes | No | No Reply |
|-----|----|----------|
| 48 | 12 | 1 |

HIGH SCHOOLS

| Yes | No | No Reply |
|-----|----|----------|
| 14 | 24 | 6 |

Again the higher institutions have a marked advantage over the high schools, which are commonly located in the heart of bustling cities and can with difficulty secure the necessary space for light and air about the building, not to mention athletic fields. Many high schools report using the city parks and public playgrounds; and one school makes use of the school yards "and a near by armory." The universities and colleges, on the other hand, have frequently a splendid equipment for out-of-door games and sports. For example, a western university reports that 2 hockey fields (used for baseball in the spring), a track, fields for archery, volley ball, and tennis courts are provided for the women students. Likewise an eastern college for women states that ten sports are open to its students,—rowing, golf links, 2 hockey fields, 4 basket ball courts, 22 tennis courts, a basketball field, running track, 2 volley ball fields, an archery court, and a riding oval.

Question XIII. Do you believe that athletics for girls should be the same as those for men? Why?

UNIVERSITIES AND COLLEGES

| Yes | No | Adapted | No Reply |
|-----|----|---------|----------|
| 1 | 44 | 14 | 2 |

HIGH SCHOOLS

| Yes | No | Adapted | No Reply |
|-----|----|---------|----------|
| 1 | 35 | 6 | 2 |

It will be seen that approximately five-sevenths of the higher institutions and five-sixths of the high schools reporting do not favor the same athletic sports for women as for men. The reasons for this wholesale disapproval were chiefly on

physiological grounds and because of the excessive nervous strain which accompanies competitive sports. In the report of an eastern woman's college the grounds of disapproval were summed up as follows: "1, Too much *nervous* strain; 2, occupies too much time and attention; 3, requires too much concentration on the few at the expense of the many; 4, professionalizes the sport; 5, interferes with academic rank." Several colleges stated that, since they did not approve of men's athletics as carried out at present, they could not approve of their adoption for women. The thirteen higher institutions favoring modified or adapted athletics for women stated, in general, that the same events might be used for women as for men but the standards set for the former should be lower, and both in strenuousness and length of time the events should be modified. One state university reported: "The heavy weight throwing, long distance competitive running and pole vaulting events have proved injurious to our girls, and are eliminated from field day events." The physical director in a city university stated that few girls keep up athletic work from twelve years on, therefore they are unprepared for strenuous games. She added that she did not oppose such sports when a girl was adequately prepared.

The reasons given by the 35 high schools which disapproved of men's athletics for girls were similar to those advanced by the colleges—namely, too great physical and nervous strain. Several high schools also referred to the fact that girls "seem to have no judgment about such exercise," playing in competitive sports at times when they should avoid heavy physical exercise. A high school in the South voiced its belief that the excitement of heavy athletics seems to "reduce refinement" among the girls taking part. It is interesting to learn that the physical directors in at least three high schools imply, if they do not expressly state, that if girls had exercised as freely as boys under similar conditions of unrestraint they might be capable of carrying on the same athletic sports. Thus a western high school writes: "Their

dress, their training by the time they have reached High School, has softened them so that they will be discouraged by boy standards and only the tom-boys will turn out."

Another southern school states that in some communities at present girls could not stand boys' athletics and adds: "Physical Training would have to begin earlier. The community must be educated to it."

The third high school suggesting this view is in the East. The director of physical training writes: "If girls were allowed the same freedom from restraint and custom, and given similar training, I believe they could do most of the same work; but as conditions are and with the monthly period of menstruation a factor to figure with, it is better to have some difference in the athletics."

Question XIV. Do you approve of inter-scholastic sports for girls? Why?

UNIVERSITIES AND COLLEGES

| <i>Yes</i> | <i>No</i> | <i>Conditionally</i> | <i>No Reply</i> |
|------------|-----------|----------------------|-----------------|
| 6 | 43 | 10 | 2 |

HIGH SCHOOLS

| <i>Yes</i> | <i>No</i> | <i>Conditionally</i> | <i>No Reply</i> |
|------------|-----------|----------------------|-----------------|
| 9 | 22 | 12 | 1 |

A glance at the tables shows that slightly over seven-tenths of the colleges and exactly one-half of the high schools reporting register their disapproval of competitive sports between different schools. The majority of the higher institutions unite in giving as their reason the intense nervous strain and excitement involved in inter-college athletics where the element of competition is uppermost. Other reasons assigned for disapproval were the professionalizing of sport, the loss of time and energy involved, and the fact that the directors of sports tend to neglect the many for the few. Certain of the replies seem worth quoting in full:

"The travel involved (in inter-collegiate games with out of town teams) is a waste of energy. Involves spending too much time on a small group in order to get a 'varsity team and decreased interest for those who don't make the team. We want sports for the largest number possible and have not needed interscholastic contests to keep up interest."

Another college writes:

"No, the average girl's high-strung emotions lead to too many unpleasant consequences all around. Work is a detriment to her both physically and mentally and in general fails to encourage the-sake-of-the-game feeling. Girls are fully satisfied without."

And a third:

"No. Temptation to play the best girls always, even when it would be wiser for the girl not to play. Tends to make girls aggressive and oftentimes too familiar. Proper chaperonage almost impossible because team seldom stays together in same boarding and sleeping place."

The reasons offered by the high schools for their dissatisfaction with inter-scholastic sports were much the same as those expressed by the colleges. One school writes:

"No. Danger from over-training because of emphasis that will always be placed on winning in inter-scholastic sports. It encourages the fighting rather than the sporting spirit. Group loyalty, co-operation, fairness, etc., can be developed through intra-school competition which can be more strictly supervised."

A large number of schools and colleges were in agreement with the theory expressed above in regard to intra-mural sports. These were declared to be productive of most of the desirable results attributed to inter-school athletic contests while largely eliminating the undesirable effects. On the other hand, 6 colleges and 9 high schools went on record as approving of inter-scholastic sports. The chief reason for such approval seemed to be the encouragement of school and class spirit which resulted. Two colleges expressed their approval as follows:

"Yes. To teach girls to meet rivals in the proper spirit, to teach them that there is more in school sports than winning or losing."

"Yes. Of course the nervous strain is undesirable, but the poise and control necessary and evident should be of value to a person in other experiences in life. Women should be developed along lines of sportsmanship, fair play, etc. Already vast strides have been made in this respect, I think."

So with the 9 high schools approving. One school in New England writes:

"Yes, if properly supervised. Creates more enthusiasm, gives the girl something to work for. I believe the High School girl needs the stimulus to spur her on because she is self-conscious. The child will play of her own accord."

The colleges and schools which conditionally approved of inter-scholastic sports all emphasized the importance of proper regulation and supervision. One school registers its approval "within limits" and adds: "Properly controlled and with girls well trained *mentally* it has proved inspiring." These reports would indicate that the success or failure of inter-scholastic athletics rest largely with the coach and referee and depend upon their ability to supervise with strictness and fairness and to develop in girls standards of self-control and sportsmanship.

Question XV. Do you believe that the habits and ideals developed in physical education "carry over" into life situations? What is the evidence?

UNIVERSITIES AND COLLEGES

| <i>Yes</i> | <i>No</i> | <i>Doubtful or Conditional</i> | <i>No Reply</i> |
|------------|-----------|--------------------------------|-----------------|
| 42 | 1 | 15 | 3 |

HIGH SCHOOLS

| <i>Yes</i> | <i>No</i> | <i>Doubtful or Conditional</i> | <i>No Reply</i> |
|------------|-----------|--------------------------------|-----------------|
| 31 | 1 | 7 | 5 |

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